Safety Area — "TripleX" ALL ROUND

THE SPHERE

Vol. CLXII No. 2121 WITH WHICH IS INCORPORATED THE GRAPHIC SEPTEMBER 14 1940

Bulmer's

BY APPOINTMENT TO THE LATE KING GEORGE V

CHAMPAGNE CIDER

MADE BY THE AUTHENTIC CHAMPAGNE PROCESS

Obtainable at all the best Hotels and Restaurants

H. P. Bulmer & Co., Ltd., HEREFORD, ENGLAND

KING SIX CIGARS

8D *each*

MADE BY J. R. FREEMAN & SON, LTD.

MAKERS OF FINE CIGARS SINCE 1839

Stop that COLD with VAPEX

V193

HENNESSY

★★★ BRANDY

Grant's Scotch Whisky

"FAMOUS FOR HALF A CENTURY"

GOOD CARS WANTED

The highest cash prices for good modern used cars are offered by The Car Mart Ltd. You will be more than satisfied with the figure offered.

Write or 'phone to-day

146 Park Lane, W.1 *Tel.: Grov. 3434*

Car Mart Ltd

320 Euston Rd., N.W.1 *Tel.: Eus. 1212*

Be Assured! THERE IS NO BETTER INSURANCE THAN

THE LONDON ASSURANCE

Head Office: 1, KING WILLIAM STREET, LONDON, E.C.4

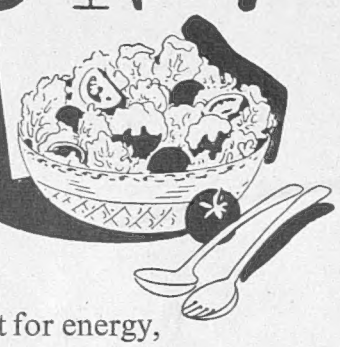
Branches & Agencies throughout the World

A.D. 1720

MINISTRY OF FOOD

THE WEEK'S FOOD FACTS No. 7

Tear out this advertisement and pin it up in your kitchen with the others in the series.



EVERYONE knows that we must eat for energy, and for building or rebuilding our bodies. But do you know that we can eat also to *protect ourselves from illness?* Science has discovered that some foods rich in vitamins and mineral salts increase resistance to infections.

All the foods in the panel below are of this kind: they are *protective foods.* They are nature's "tonics" and nature's "medicines". They should be part of your diet as much as the body-building and energy foods. Begin to eat wisely now for the sake of your health in the winter.

ON THE KITCHEN FRONT

Do you listen-in to the hints and recipes given at 8.15 every morning on the Wireless?

CHIEF PROTECTIVE FOODS

- Milk
- Butter or Margarine
- Cheese
- Eggs
- Herrings (fresh, canned or salt)
- Salmon (fresh or canned)
- Liver
- Potatoes
- Green Vegetables (fresh or canned but not dried)
- Salads
- Fruit (fresh or canned but not dried)
- Carrots
- Tomatoes
- Wholemeal Bread

HOW TO DRY PLUMS.

The whole secret of drying plums is in drying them *slowly.* First wash your fruit and arrange on muslin-covered racks or wire trays. Dry as slowly as possible, at never more than 120°F. Use, on several consecutive days, the heat left in your oven after cooking. Keep the oven door ajar. After about 15 hours' drying, test by squeezing a plum gently. If the skin doesn't break, the fruit is ready. Allow to cool for 12 hours and then pack in jars.

A NEW SALAD.

Wash and drain a crisp lettuce, put it in a bowl and pour over it a dressing made by mixing thoroughly 2 tablespoonfuls salad oil, 1 tablespoonful vinegar with salt and pepper to taste. Turn the lettuce over and over in the dressing with a wooden spoon; then line your bowl with it. Pile in the middle a grated raw carrot, a chopped apple, a cupful of cooked diced potatoes, and decorate with chopped mint and a small chopped onion.

THE BLACKBERRY CROP.

Blackberries are ripening fast all over the country. Don't neglect this good and health-giving fruit. Try to organise blackberry-picking parties—but take care to close all gates and avoid trampling on crops.

THE MINISTRY OF FOOD, LONDON, S.W.1

Swan Pens are also on "active service"

To those on active service, a Swan Pen is an essential part of a man's equipment. For a Swan makes writing so smooth and easy, so completely trouble-free that he can scarcely help writing—and writing often. So give him a Swan and count on lots of letters.

SWAN PENS

AT PEACE-TIME PRICES: Leverless Swans 17/6 to 42/-. Visofil Swans, 25/-. Lever-filling Swans from 10/6 Blackbird Pens 7/6 (Ladies' size 8/6). Fyne-Point Pencils from 5/-. Of all Stationers and Jewellers.

Made throughout in the British Isles by Mabie, Todd & Co., Ltd. Branches: Swan House, 133/135 Oxford St., W.1, & 79 High Holborn, W.C.1, London; 3 Exchange St., Manchester. Head Office temporarily at 26 Donnington Square, Newbury, Berks.

THE SPHERE IN WARTIME

OWING to the paper shortage it is essential to place a standing order with your newsagent to make sure of getting your copy of THE SPHERE each week.

By a Paper Control Order, the output of British paper is drastically restricted and all publications are compelled to exercise the strictest economy and in future no periodicals can now be stocked for casual sale. It is therefore imperative to place an order for your copy each week.

Those desiring to have THE SPHERE sent to friends in neutral countries should send a subscription to The Publisher, Illustrated Newspapers, Limited, 32-34, St. Bride Street, London, E.C.4. Subscription rates are given hereunder:—

	Twelve months, including Xmas Number	Six months, including Xmas Number	Six months, no extras	Three months, no extras
INLAND ...	£3 3s. 0d.	£1 12s. 9d.	£1 10s. 6d.	15s. 3d.
CANADA ...	£3 0s. 8d.	£1 11s. 5d.	£1 9s. 3d.	14s. 9d.
ELSEWHERE ABROAD	£3 5s. 6d.	£1 14s. 8d.	£1 11s. 8d.	15s. 10d.

The above terms are inclusive of postage.

ON SALE EVERY FRIDAY, PRICE 1/-

THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly
London, September 14, 1940

THE PRIME MINISTER IN THE BOMBED AREA

A Picture Taken During His Visit to the Dockland Area and the Raided East End Streets

Mr. Winston Churchill paid a visit to the Dockland area of London which had been heavily bombed by the German raiders at the opening of the week. Pressure of business had kept him in Downing Street until the early evening, when he set out on an informal tour of Dockland. Everywhere he went Mr. Churchill was quickly recognised and given a most enthusiastic reception. Crowds gathered around him shouting "Good old Winston." "Cheer up. We are winning," was Mr. Churchill's remark to one East End woman. His tour had not concluded when an alarm was sounded. He stayed for a time in the East End before returning to Downing Street. The following day he paid a visit to bombed areas in the City

Postage—Inland, 2d.; Canada and Newfoundland, 1½d.; Elsewhere Abroad, 2d.

A WAR NEWSLETTER—No. 54

32–34, ST. BRIDE STREET, E.C.4

THE AIR RAID WARDENS AND MEMBERS OF THE FIRE SERVICES HAVE BEEN MAGNIFICENT: These men of London's Air Raid Services in the East End are salvaging citizens' property in an area which suffered very heavily in the two mass raids on Saturday and Sunday: No praise can be too high for the manner in which *all* members of the Air Raid services carried out their highly dangerous duties before, during and after the savage and indiscriminate bombing of London. Even when the raiders were actually overhead, with bombs dropping nearby, the rescue and salvage work went on. After months of inaction these splendid men—most of them volunteers with their ordinary work to do during the daytime over and above their night-time work—have demonstrated a determination and an efficiency little short of heroic

THE BOMBING OF LONDON.—The act of war, which we expected and prepared for, has come on us and is continuing. The hub of the Empire is under a constant bombardment. Modern warfare and the invention of flying has made possible this supreme imbecility of a battering match. Our whole sympathy in this tragedy centres on the human victims, the innocent victims. Property means nothing at all. Lost possessions do not count. The nation is proud to share every loss. How have Londoners met this greatest test of character? I am reminded of Wellington's remark to Creevey in the Park of Brussels in 1815, "It all depends on that article"—pointing to a British Tommy. In 1940, Churchill says the same words pointing to a London cockney (proud name), or to any average man or woman in the crowded streets of our vulnerable cities. In June, 1815, "that article" proved dependable, and a dictator fell. In September, 1940, that other article—the civilian in the front line—is proving no less so. To him and her go out the glory, and the gratitude and pride of Britain of the watching world. Men, women, and children, they have stood up and stood firm, as the men of Hougoumont. They have done their duty and never winced or flinched. War is imbecile, war is vile. It is forced upon us who prefer to die than to live as slaves. On to the bitter end! "Lay on, Macduff, and damned be he who first cries hold, enough."

LEST WE FORGET.—After a year of war, we have all been taking stock in our businesses. The shelves were somewhat depleted here and there and the till is not full. But the stock deficiencies are made good and we are out for big business in 1941. Hence our heavy drawings on our balance and credit. I will add but one late note to the general survey of a year of war. The best asset we have to show is the character of our nation. It has come through a hard test and has greatly benefited by the test, and it gives us grounds for hope that the improvement will be maintained so as to enable us to endure still harder tests, and, beyond victory, to enable us to play an influential part in finding the way to a just and lasting peace for all peoples. We see now how pestilent an age were those twenty years between the world wars. Diseases and miasmas hung over it and we all caught the infection. Some were brutalised, more made flabby. We in Britain feel that leadership was wanting. As a nation and as individuals we hitched our wagons to many nebulous, erratic stars and were carried whither we knew not. In the past two years we have suffered many bitter humiliations, have known defeat, have come near destruction. But we saved ourselves at the pit's edge and its fires have cleansed our spirit and melted our dross. Without vanity and without presumption, we may feel (and be proud to feel) that the Empire has a better opinion of the old country than before September, 1939, and that America and other free peoples see and applaud that spiritual change in the British nation, and consider us worthy for the task to which we have set our hands and seals.

"QUID PRO QUO."—In exchange for certain 99-year leases of air and naval bases in Newfoundland, the Bahamas and Bermuda, and in various British possessions on and off the mainland of South America, the United States have paid a rent in advance of 21,000,000 sterling in kind, to wit, fifty destroyers which were due for scrapping in 1936, if the London Naval Treaty of 1930 had been carried into effect. These old destroyers are in good shape and are very suitable for the work for which we intend them. They much more than fill the gap left by the defection of the French Navy and relieve our greatly overworked destroyer flotillas. Indeed they come at a vital time for the protection of convoys, for harassing the enemy at sea and for safeguarding the vital trade and the security of the North Atlantic. The United States, on her side, secures the means to do her part in safeguarding the North Atlantic and to guard the vital approaches to the Panama Canal. Both parties to the contract are at one in their objects; neither conceive that during the century to come, while the leases are in being, the two contracting nations could be other than brothers-in-arms or brothers-in-peace. No subject of King George changes his nationality, no sovereign right is conceded. Politically, militarily and economically the leases will benefit the inhabitants concerned. And the "rent" will come in to the lessors at a very happy juncture. The "deal" is rightly labelled epoch-making. For one thing, it establishes a common faith in an epoch of eternal peace between the two English-speaking nations, a belief that recourse to war in any disputes between them is "unthinkable." The Atlantic's peace and freedom are guaranteed by a new League of English-speaking peoples.

PEACE IN THE BALKANS.—Only the optimism of youth or the pride of a Nazi could utter Ribbentrop's brave words that peace has at last been attained in the Balkans, among the little nations once brightly labelled the "Little Entente." I think the word "entente" has gone out of fashion. It has had little meaning at least in the Balkans. After the Four Years War Rumania more than doubled her size. She took the southern part of the Dobrudja from Bulgaria after the second Balkan War (1913). She seized the Russian province of Bessarabia in 1919, and Bukovina, before the war a crown province of Austria. Transylvania and Eastern Hungary fell into her lap when the dual monarchy was broken up at St. Germain and Trianon. Alas, poor Carol. His life is of not much value even to Rumanians. He refused to read the lessons of modern history. Rumania is once more the shape of a boot (like Italy); but the boot has been on the other leg. She has indeed been kicked hard in the pants and nothing in her recent contortions and wriggles has induced in Britain much sympathy with her fate. Always dictator-ridden, it is her fate to be a changing unit in a part of Europe which can never know peace and settlement; the Babel of what has been called European civilisation is doomed to be Babel until all nations speak and think in a common language, until territorial claims and racial jealousies cease to have a meaning. That will not come in our day.

GOOD NEWS FROM POLAND.—Goebbels seems to have visited German-occupied Poland to speak cheerful words at the celebration of the anniversary of the Nazi invasion. He made some notable points. "Germany has become immune from blockade and the food situation in Germany and Nazi-occupied Europe is so secure that British hopes of 'general' hunger are piecrust." (This point was less clearly handled by the Führer.) That implies that no Nazi or Nazi slave will object to our going on with our absurd efforts to keep essential food and raw materials from the Nazis. "Against Britain's most characteristic weapon, her lying campaign, Germany was well armed from the start. Everywhere in the world the clearness, reserve and veracity of German news reports, in contrast with British lying, have achieved their object." The continuance of our futile campaign of lies can therefore cause no further irritation (but rather satisfaction) in Nazi circles. It is but just to Goebbels to set on record that he never flinches from his duty, though his job is one which few would care to handle and very few are qualified to take on. Before he left for Katowice, he released a paragraph for the Bremen broadcast in English. "Great Britain has learned nothing from her failures. She still lives in a world of the past. The last twelve months has demonstrated the superiority of the German Air Force in the most striking way."

H.G. TRAINING.—No doubt at all there lies before H.G. commanders an important and heavy duty this autumn and winter—to make good before next spring the gaps in the training of their men. For a majority, no doubt, such instruction will be in the nature of refresher courses. It has been pleasant to watch how drill and musketry instruction come back to old soldiers and how soon they can make their rifles "sing in unison," as they practise the manual in squads. So, too, with map reading, message writing, march discipline and so forth, the essential and unchanging lessons are quickly remembered. A lot of useful little books on training are coming out. They all appreciate the truth that the best way to teach the art of war is by humour and precept. The best way to teach the right way is to ridicule the wrong way. That old classic *The Defence of Duffer's Drift*, which showed up the errors of our Boer War strategy, is still the pattern for H.G. manuals. I recommend to my brother Guardsmen (Home) *Home Guard Training* by Col. Levy, 1s. (Eyre and Spottiswoode). It is timely and useful and admirably selective.

QUISLING SIGNALLING.—I would be the last to pooh-pooh the necessity for constant watch upon fifth column activity. Yet to dissipate our energy at such a time does no service to our cause and we should pursue the Quislings with a sense of proportion and of humour. We did not do so at the beginning of the Four Years War when every cement floor in Essex was a German gun-emplacement. We must retain a sense of proportion now. This signalling from the air, for instance. Quislings are not by nature heroes. They like to preserve their skins and to earn their rewards from the conquering Nazis. Very few Quislings, living in crowded cities, can be willing to flash torches from roof tops to the Nazis overhead, to indicate suitable targets. I still believe that the majority of the Quislings in Britain to-day are criminals, not of malice aforethought but of sheer, brutish carelessness, which in war is a major crime. One thoughtless man or woman can bring death and destruction on a thousand neighbours. It is right that we should keep watch on the black-out conditions during an air raid, but I feel certain that watch will detect more selfish fools than Quislings. That local news from our villages leaks quickly into Germany we know, though Haw-Haw relies a good deal on guesswork and is often "just wrong." But some of the suspected devices of the Quislings are too far-fetched to justify a dissipation of our energies from more vital safeguards and war measures.

MOTH AND RUST.—The present fashion among the élite of wearing shabby clothes is not a new one on me. I was a pioneer in the movement. In advance of my age, I set the fashion about 1930 and found few followers. The trouble is that I am still handicapped by my past. I cannot wear out, and have not the heart to wear, the expensive redundant suits which I bought in the 'twenties and which, since men's (or elderly men's) fashions change little, are still as good as new. And there those splendid suits remain, a constant liability, an occasional anxiety. The moth enjoys eating the fine cloths, those thieves break in even to tin boxes and steal their nap. If I had the heart to wear them, they would last longer, but that I cannot do. A martyr to public opinion, I must be to-day in the fashion, and the fashion dictates shabbiness. So I wear the suits of the 1910's and the suits of the 1920's are a constant battle-ground on which my household fights the moths. Yes, I know what your answer will be.

DROUGHT.—The month of August gave us a total of ·12 in. of rain. I believe I have never recorded so low a monthly figure. It brought the total rainfall for the year to 16·70 ins., which is certainly the lowest figure for the first eight months of a year since I began to keep a record. If the average for the past five years is to be maintained, we shall have a liquid autumn. The average rainfall per month for the rest of 1940 must be above 5 ins. We have more than 20 ins. to make up. We shall not do that, though we have a wet time ahead without doubt.

THE OLD STAGER

THE GREAT FIRE IN DOCKLAND

(Saturday, September 7)

The Blacked-Out City in the Foreground Lit Up by the Smouldering Fires at the Docks

This was the great blaze which London and the outer suburbs saw on Saturday night. The fire was caused during the daylight raid on Saturday afternoon last when several docks were hit: despite the efforts of the A.F.S. it was impossible to subdue the flames before evening came on. Consequently, in the hours of darkness, the blaze served as a guide for enemy bombers: lit up as they were, both banks of the Thames east of the City served as targets. After the raid, however—the worst yet experienced by London—the Port of London Authority was able to state that "while damage by fire at the Docks is considerable, discharging and loading berths are intact and all services of the port will be maintained"

WHAT THE LONDON BARRAGE LOOKS LIKE IN OPERATION

The London Defences in Action on the Night of the 4th

This picture, taken from a city roof-top, demonstrates the manner in which the anti-aircraft barrage operated during the big night attack which preceded the heavier ones of the week-end. On Wednesday evening, September 4, the alarm sounded at 9 o'clock and from then on large formations attempted to break through the city's outer defences. The terrific barrage put up by the anti-aircraft guns, however, kept the main bodies of raiders from approaching Central London. This picture shows the hundreds of bursting anti-aircraft shells starring the black sky whilst the searchlights stab up at the enemy planes

The KING VISITS BOMBED AREAS

THE KING IS GREETED BY THREE-YEARS-OLD JOAN MILES AND HER MOTHER: JOAN WAS IN AN ANDERSON SHELTER WITH HER PARENTS WHEN THE SCHOOL OF WHICH HER FATHER IS SCHOOLKEEPER WAS HIT AND BADLY DAMAGED

DURING HIS TOUR OF EAST LONDON AND THE ELEPHANT AND CASTLE THE KING INSPECTS SOME OF THE WONDERFUL A.R.P. WARDENS OF THE BOMBED AREA

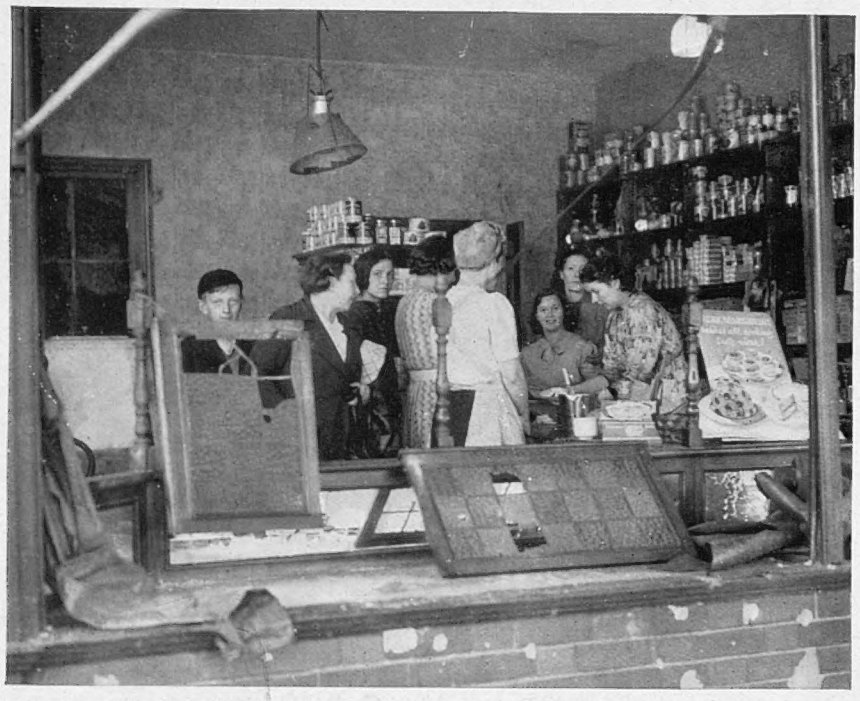
On Monday, after the two heavy night attacks of Saturday and Sunday, the King made a tour of the two working-class quarters which suffered so heavily from the "reprisals" bombers. He saw members of the splendid A.R.P. services actually at their work of clearing away debris and restoring order, and himself declared that "everyone has been wonderfully brave"

SOLDIERS IN THE BOMBED AREA, WHO HAVE BEEN EMPLOYED ON THE TASK OF CLEARING AWAY DEBRIS, WATCH THE KING AS HE PASSES ON HIS TOUR OF INSPECTION. THIS VISIT WAS CARRIED OUT ON MONDAY AFTER TWO NIGHTS OF INDISCRIMINATE BOMBING OF LONDON'S WORKING-CLASS POPULATION

LONDON FACES UP TO IT

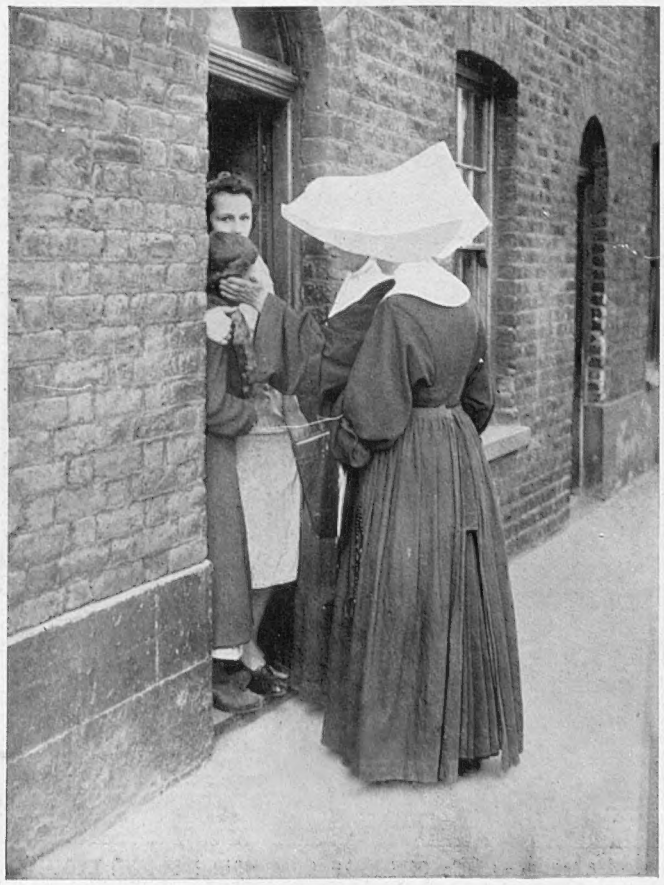
AS USUAL, LONDONERS SOON ADAPTED THEMSELVES TO "WAR-TIME" CONDITIONS: WHERE SERVICES WERE INTERRUPTED LONG QUEUES AWAITED CONVEYANCES

A POLICE OFFICER STOPS A CAR TO SECURE LIFTS FOR CITY WORKERS: THE BEHAVIOUR OF THE CITIZEN HAS BEEN ADMIRABLE



DESPITE THAT THE PREMISES HAVE BEEN BADLY INJURED BY BLAST BUSINESS PROCEEDS AS USUAL IN A LONDON PROVISION STORE

NO TIME WAS WASTED WHEN DAMAGE WAS CAUSED TO GAS OR WATER MAINS: WORKMEN WERE SOON REPAIRING THIS WATER MAIN DAMAGED BY A BOMB



COMFORTING THE HELPLESS VICTIMS OF THE RAIDERS: TWO SISTERS OF MERCY CHEERING WOMEN DRIVEN FROM THEIR OWN HOMES

IN THE EAST LONDON DISTRICT WHICH BORE THE BRUNT OF THE ATTACKS—PEOPLE QUEUING UP FOR TRANSPORT AS THEY EVACUATE TO TEMPORARY HOMES IN OTHER PARTS

After nights of the most intensive bombing London has yet experienced the morale of the citizens of this great city remains unshaken. The damage has been severe—but mostly in working-class districts, where hundreds of poor, honest, respectable people were temporarily rendered homeless. In some cases their homes have been destroyed utterly, in others homes have had to be abandoned until repairs could be carried out, or time-bombs exploded. Everywhere, however, the faith of the people has remained unshaken: the indiscriminate bombing has welded the whole nation in a greater determination than ever to see the war through to ultimate victory

A BLOCK OF FLATS IN THE LONDON AREA: THE WALL ON THE RIGHT SEEMS TO HAVE SHIELDED THE SMALLER HOUSES BEYOND FROM DAMAGE

DAMAGE IN A LONDON STREET WHERE FIRES WERE STARTED AND BUILDINGS DEMOLISHED DURING SUNDAY NIGHT'S RAID

EIGHT HOURS AFTER THIS HOUSE WAS WRECKED DURING THE BOMBING OF DENSELY POPULATED EAST LONDON, TWO CANARIES WERE FOUND IN THEIR CAGE AMONGST THE WRECKAGE GAILY CHIRPING AND QUITE UNDAMAGED

THE RESULT OF A DIRECT HIT: ONE HALF OF A HOUSE BLOWN CLEAN AWAY, WHILE OTHER HOUSES IN THE STREET REMAIN INTACT. NOTE THE ARTICLES HANGING ON THE DOOR WHICH STILL REMAIN IN POSITION

THE "REPRISALS" BOMBING OF LONDON, SEPTEMBER 7–9

Pictures Showing the Damage Caused by German Night Raiders as a "Reprisal" for the R.A.F. Bombing of Berlin

ONLY A PORTION OF THIS BUILDING WAS DAMAGED: MOST OF THE WINDOWS WITHIN A FEW FEET OF THE EXPLOSION ARE STILL INTACT!

ONE OF THE PITIABLE RESULTS OF THE RAIDS—A WORKING-CLASS STREET WITH OCCUPANTS' FURNITURE PILED OUTSIDE THEIR BOMBED HOMES

ANOTHER STREET SCENE, SHOWING HUMBLE WORKING-CLASS DWELLINGS WRECKED BY THE INDISCRIMINATE BOMBING OF LAST WEEK-END

A SCHOOL FOR CRIPPLES IN THE LONDON AREA DEMOLISHED BY BOMBS: BEHIND IS AN L.C.C. SCHOOL ALSO DAMAGED BY THE SAME EXPLOSION

RESIDENTS LEAVING A DISTRICT IN THE LONDON AREA WITH THEIR BELONGINGS AFTER MANY OF THEIR HOUSES HAD BEEN RENDERED UNTENABLE. BEHIND THEM IS A FIRE WHICH WAS STARTED DURING THE BIG ALL-NIGHT RAID

AND YET THE WOMEN CAN SMILE! MRS. BENNETT, TYPICAL OF SO MANY LONDON WOMEN, NURSES HER NIECE FLORRIE, WITH A NEIGHBOUR, MRS. FERGUSON, LOOKING ON

The whole of London is now a battle front, since the German High Command has carried out its threat to bomb the City as a "reprisal" for the R.A.F. attacks on Berlin. The two raids of Saturday and Sunday nights were of a ferocity hitherto unequalled in this war. Apparently, a succession of bombing planes, flying very high, cruised over London—dropping their bombs indiscriminately. As a result of the night raid on Saturday alone, some 300 people were killed and 1,300 to 1,400 seriously injured. From a military point of view the damage was not serious, but many working-class homes were destroyed

ANOTHER IMPRESSION OF THE GREAT DOCKLAND FIRE

This remarkable picture was taken from the roof of a newspaper building in Gray's Inn Road whilst the great Dockland fire was at its height, in the early morning before dawn on Sunday, September 8. The whole of London was clearly visible—so that the German bombers had little difficulty in finding their way to the capital. Had it not been for this, they would probably not have been able to wreak the damage they did during the night

WRECKAGE IN A LONDON HOSPITAL WARD: THIS WARD WAS FILLED WITH PATIENTS WHEN A BOMB DROPPED—BUT NONE OF THEM WAS INJURED!

A FREAK OF THE RAIDS: A LONDON OMNIBUS WHICH WAS HIT BY A BOMB WAS BLOWN UP INTO THIS MOST EXTRAORDINARY POSITION

A BOMB FELL HERE AND WRECKED DWELLING HOUSES: THE ANDERSON SHELTER, HOWEVER, ALTHOUGH DAMAGED, NEVERTHELESS PROTECTED THE PEOPLE UNDER COVER WITHIN

THIS "FLAG POST" WAS AT THE BOTTOM OF THE BACKYARD GARDEN OF AN EAST END HOUSE, NOW A PILE OF DEBRIS. BUT THE UNION JACK STILL WAVES PROUDLY OVER THE RUINS

SPECIAL SPHERE SECTION

WHAT are the CHANCES of INVASION?

Some of the Factors of Weather and Topography which will Have to be Carefully Taken into Account by the Invader

ALTHOUGH the Nazi Government has up till now secured most of its successes by doing the things which were not expected, it would be running a colossal risk, even with its proved willingness to sacrifice enormous numbers to secure success, if it did not pay careful attention to the twin factors of tide and weather before launching the long-threatened invasion, for it would seem that these must be the deciding factors. Unfortunately for the German plans, they cannot be counted upon to coincide in the manner desired, so that there must be a certain amount of compromise and the desire for a strong Spring tide, a flat calm, and a late rising moon cannot all be satisfied.

Parachute troops would very probably be used to increase confusion, but in a country like Britain, after months of intensive preparation, they are not likely to meet with their success in unprepared Continental countries or France in panic with her defensive lines turned. It may be taken for granted that the main body of the invasion will come by sea.

ONE OF THE HAZARDS THE INVADERS MUST FACE: Not always is the sea calm and smooth—especially in the North Sea and in the Channel. And when the wind and sea *do* get up they will prove very formidable to the flat-bottomed craft we are told the enemy has been assembling: even more substantial craft, heavily laden with men and munitions, would find this sea distinctly unpleasant even during a short crossing

For the actual landing a Spring tide, with the highest flood and the lowest ebb, is ideal and the equinoctial Springs, occurring in the latter part of September, are higher than any. The high tide would permit the Germans to get their advanced troops as far inshore as possible before disembarking, from men-of-war by boat or from barges, coasters and other small craft beached. For one thing the beach at high-water mark is generally more steep-to and firmer than it is farther out, so that the men would have to do less wading through soft sand, mud and water in face of the fire of rifles, machine guns and light shell guns like anti-aircraft and anti-tank weapons. No doubt the beach and cliffs would be very well bombed and machine-gunned by aircraft accompanying the army, but the defences are well protected by this time.

Another advantage of landing well inshore at the top of high water is that the boats would feel less effect from the longshore current which encircles Britain and which would be liable, as it did with the British landing at Anzac in 1915, to sweep the boats well away from the planned spot in the darkness.

The Germans would have to reckon on their advanced light formations being able to establish themselves on shore to begin with, whether they come in men-of-war or other craft, for towed rafts and pontoons would be very risky with the chance of a change of weather. The mechanised units on which the German army depends so much would have to be brought in light-draught craft, of which they have plenty available, which could beach themselves and be left practically high and dry at low water for the tanks, etc., to be hoisted out.

However desirable the top of Spring tides may be for the actual landing, they have the disadvantage of always going with the full moon and the Germans naturally desire a very fair measure of darkness, especially in the early part of the night, to make the greater part of their passage without being spotted by ships of the Royal Navy or aircraft of the Coastal Patrol and immediately reported by wireless.

The transport fleet, no matter what its nature may be, is bound to be very vulnerable and the remnants of the German Navy, even reinforced by warships seized in France, would not be sufficient protection, although no doubt the use of the motor torpedo boats on which they have been paying so much attention lately would be useful in creating confusion and would be a considerable danger to British light craft if losses were not allowed to count. As it is unlikely that even German organisation would permit a large army to be embarked in a matter of hours, they must also feel reasonably assured of a spell of calm weather before the embarkation is started, not only on account of the difficulty of landing on the British coast in any kind of a swell or surf, but also for the sake of their safety on the passage across.

In his book, *The Riddle of the Sands*, which created such a sensation some years before the late war and which is still to be found on the bookshelves of most yachtsmen, the late Erskine Childers envisaged an invasion of Britain by means of the big Rhine barges. The Germans have plenty of these vessels available although a large number are employed bringing supplies from the Balkans, but even after months devoted to their structural strengthening it is doubtful whether they could be used to any great extent, for they are designed for river work only and even in the short sea passage across the mouths of German estuaries a good many of them contrive to break their backs, while a stranding in the inland waterways is rather more than a 50–50 chance of total loss.

A comparatively small number of the smaller ones might be used, and of course there is the chance that special barges have been built with greater structural strength since the outbreak of war, but it is more likely that reliance will be placed chiefly on coasters, tugs, fishing vessels, pleasure craft, and the short-sea traders which run across the North Sea and Baltic in normal times.

(Continued on following page)

—AND NOT THE WHOLE OF THE BRITISH FORESHORE IS SUITABLE FOR LANDINGS! On the contrary (as we indicate above, and on the following pages) there are whole stretches of coastline where it would be difficult to gain a foothold even were there no defenders to take prompt action. In some cases the foreshore is loose and boglike: in others high cliffs, whose bases are swept at high tide by the sea, render a landing extremely hazardous to any armed force and later reinforcements very problematical

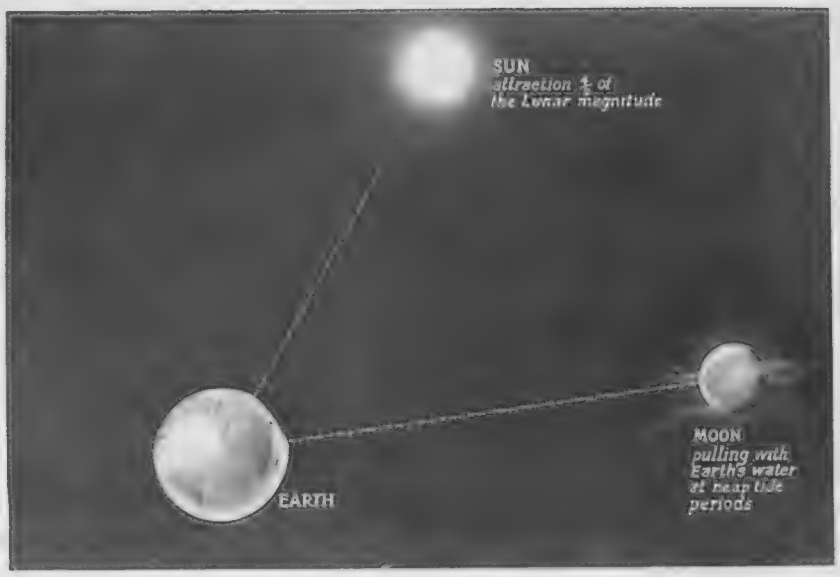
Drawing by Montague Dawson

MOON AND TIDE MUST BE IN CONJUNCTION FOR A SUCCESSFUL ATTEMPT AT INVASION:

Let us assume that September 20 has been chosen as the date for invasion. On that day the moon will rise at 7.45 p.m. (Summer time) and the night will be bright. The tides, too, will be favourable. A sheltered cove such as this would then prove admirable for the invader—a firm foreshore, shelter under the rocks, and deep water with a rising tide to bring further troops. But the conjunction of all these factors would mean the most careful adherence to schedule—and this may be difficult

THIS IS ONE TYPE OF BEACH ON WHICH A LANDING MIGHT BE ATTEMPTED:

There are many spots similar to the above around our shores, especially on the South and South-West coasts. It might appear as if such places would be suitable for the landing of troops; but comparatively small forces of defenders could easily beat off attack, and the invaders would not have an easy task in scaling the cliffs

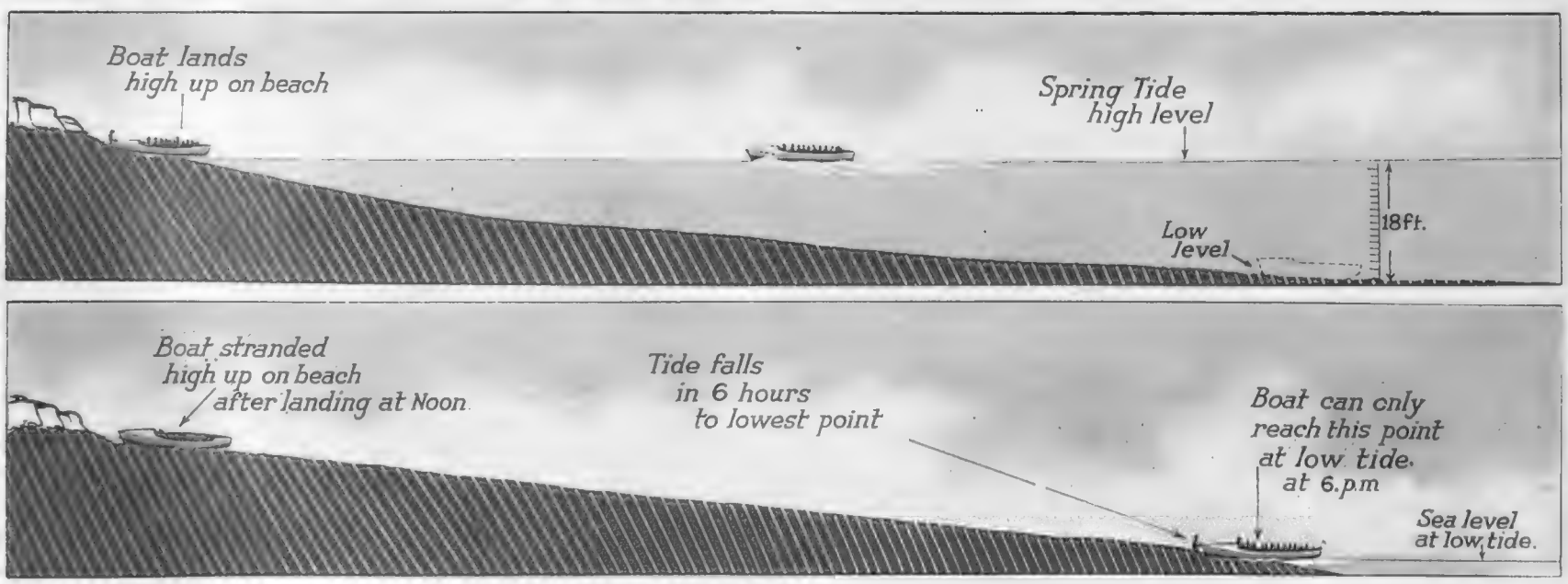


THE CAUSE OF SPRING OR "HIGH" TIDES—THE SUN ACTING WITH THE MOON:

Observation of the tides by anyone living by the seaside soon shows that high tide during a month varies from week to week. On one particular day, high tide will be found to reach very far up the beach; correspondingly low tide on the same day will be found to be unusually low. This will be found to coincide at, or very near to, the New Moon or the Full Moon, because then the sun and moon exercise attraction on the waters of the globe, piling them up under the combined gravitational action of earth, sun and moon

(Continued from preceding page)

There is no doubt that the possession of the huge fleet of Dutch motor coasters, seaworthy and roomy in spite of their light draught and designed to take the ground at low water, was one of the purposes of the German invasion of Holland, but the Dutch army resisted long enough to permit the vast majority of these vessels to be brought across to England by their owner-skippers, to prove how valuable they would have been for German purposes by the work they did at the evacuation of Dunkirk. A considerable number of small vessels fell into the hands of the Germans in Norway, but their design is not nearly as satisfactory as that of the Dutchmen, the same applying to the Danish coasters. Even without these Germany has a large number of coasters herself.



THE HIGH TIDES OF THE SEPTEMBER EQUINOX MAY NOT PROVE AN UNMIXED BLESSING

It has usually been assumed that the latter half of September with its high tides would prove a suitable time for Hitler's invasion attempt. That this is not so is demonstrated by the two diagrams above. When the tide is high, craft carrying troops would naturally be in a good position: but as soon as the tide falls it drops a long way short of this point: in six hours there would be an 18 ft. drop—a distance of hundreds of yards. If pill-boxes have been erected on a flat beach these would do an enormous amount of damage; a rocky beach is likely to smash up a boat and the men will have a difficult job in scrambling over slippery rocks in the heavy gear that a German has to carry

SPECIAL SPHERE SECTION

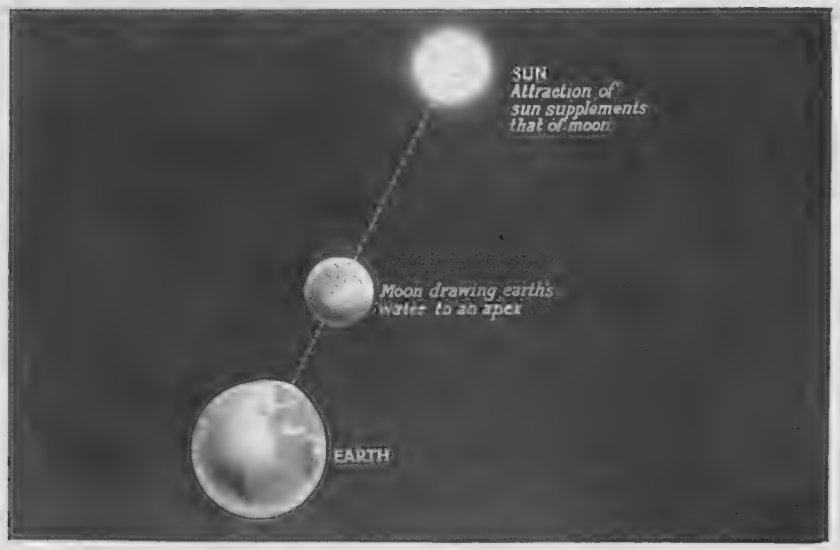
WHAT ARE the CHANCES of INVASION?

A light mist, which is very frequently encountered around the Equinox, would be an advantage against air observation, but anything like a thick fog would be fatal to a vast armada of small ships in close order steaming for definite points to land their troops. The creation of an artificial mist has been discussed and it is quite likely, but it must be on a light breeze blowing towards the shore to keep it ahead of the invading fleet; without this it would hamper their own ships, and if the breeze were too strong it would raise a sea that they certainly do not desire.

If they were able to seize British ports as they did the Norwegian it would certainly save them infinite trouble, for the troops could then be carried in larger units in liner transports like those prepared for the 1915 invasion of Britain which had to be abandoned. This might have been possible had they struck while the greater part of the British Army was in France and only small forces of infantry and artillery protected the ports, but the evacuation of the greater part of the Expeditionary Force from Dunkirk, Brest and Cherbourg was a success on which the Germans had not reckoned and the situation is very different now that Britain is a nation in arms with every preparation made at every conceivable danger spot. The additional risks must be run if Britain is to be invaded now and although Hitler would seem to have as little understanding of sea power as Napoleon had in his day, there are certainly some of his advisers who understand it and it remains the greatest factor in Britain's favour.

Frank C. Bowen

CONDITIONS IN THE CHANNEL MAKE THINGS DIFFICULT FOR AN INVADER IN A HURRY: The English Channel lies between two very large masses of water, the North Sea and the Atlantic Ocean: in consequence, there is a very heavy tide; in the Narrows of the Channel there is a difference of as much as 18 ft. between high and low water at the Spring tides. In addition there are opposing currents flowing up-tide which cause much confusion to small craft and shipping generally. A big "Spring," or very high tide may thus *not* prove so advantageous to an invader as many people seem to think



THE CAUSE OF NEAP OR "LOW" TIDES—THE SUN AND MOON ACTING AT CROSS PURPOSES: At the same time, observation of tides on a beach will show that at certain times high tide does not reach so high a point as at others; on the same day the point of low tide is not so far down the beach. This is known as the period of Neap Tides. These occur twice during the month and coincide with the periods of the intermediate quarters of the moon. At, say, the periods of the first Quarter the sun's attraction is working against the moon's, as it were, flattening out the tides. Local geography and ocean depths everywhere make the tides vary for a particular region

THE BOGGY, SLIPPERY STRETCHES OF FLAT BEACH OF THE SOUTH AND EAST COASTS: For many miles around the coast there are stretches of foreshore like the above. If they have been covered with barbed wire, successive waves of invaders at lower tides would find difficulty in reaching terra firma

Drawing by Montague Dawson

A SCENE AT THE MOUTH OF AN EAST COAST ESTUARY—HERE THE PROBLEM FOR THE INVADER WOULD BE MOST COMPLEX

It might be thought that such a spot would prove satisfactory for the invader. But just consider—the tide runs down to the sea with considerable strength. When it is out big stretches of flats are uncovered; these present a slimy, slippery, uncertain expanse, with treacherous rivulets masking mudbanks and wreckage and other traps for the unwary. If the invader looked for a foothold he would find very few for a landing in force—in fact, the only practicable point would be the local "hard" or landing place—and this would, of course, be strongly held by defenders already apprised of the enemy's direction and eager to beat them back

THE HOME GUARD IN ACTION

Carrying Out Realistic Exercises Under War-time Conditions, the First of Their Kind in South-West England

THE EARL OF ESSEX, COMPANY COMMANDER, UNDER WHOM THE EXERCISE WAS CARRIED OUT, LISTENS TO THE LECTURE

ATTACKING "ENEMY" VEHICLES WITH THE MOLOTOV COCKTAIL, THE HOME-MADE PETROL BOMB WHICH HAS NOW BEEN OFFICIALLY ADOPTED FOR USE AGAINST TANKS

BOMBING INSTRUCTION AT HURLINGHAM, CARRIED OUT BY ASTURIAN MINERS, WHO ACQUIRED THEIR PROFICIENCY IN SPAIN

AN ARMY OFFICER DETAILS THE LESSONS OF THE MANŒUVRES: How the Home Guard could take effective action against invaders was demonstrated in South-West England when a Home Guard Exercise, the first of its kind, was watched and refereed by high officers of the Regular Army. For the purposes of the Exercise (which was carried out under the control of the Earl of Essex, a local company commander) it was assumed that 200 enemy soldiers had been landed by troop-carrying aircraft and were equipped with two light tanks. During the subsequent operations all the invaders were dealt with and their tanks destroyed

A DEMONSTRATION OF TANK DESTRUCTION AT HURLINGHAM

INSTRUCTION IN HOW TO FIRE TRENCH MORTARS

Following on the great success of the Training School at Osterley Park—previously described and illustrated in these pages—another school has now begun a similar scheme of training for the Home Guard. This school, the commanding officer of which is Colonel Hay, is at Hurlingham: its instructors are ex-army men with actual knowledge of modern warfare, street fighting, etc. The pictures we reproduce were taken on the opening day, when demonstrations indicative of the scope of the new Training Centre were given. Many hundreds of the Home Guard were present on this occasion and profited greatly from the lessons they were shown

SPECIAL SPHERE SECTION

FRENCH EQUATORIAL AFRICA

The Vast Area in the Heart of the Black Continent which Has Now Come Under the Control of General de Gaulle

Described by NEGLEY FARSON

(Author of "Behind God's Back" (just published by Gollancz), which Analyses Conditions and Life in this French Territory)

ONLY one who has seen them in action can realise the bitterness with which the French officials in Equatorial Africa must have scorned the offer of capitulation from the Pétain Government. The heroic sacrifice they made. For ten, twenty, even thirty years all these men had lived with the thought of just one day: the day when they would receive their pensions and sail back to retire in cool France.

On the long road, cut by its hundreds of unbridged streams and rivers, that runs along the Equator from Bangassou near the Sudan across to the port of Duala in the French Cameroons, I have talked with dozens of these men. They all had the same dream: the villa, a garden, wine under the arbour, the delight of a *fine*, dominoes, and some sparkling conversation in the café. Some spoke to me of a river, some of a lazy poplar-shaded canal, fishing for yellow perch. Some winked, and spoke of the Boulevards. They all talked of food—oh, the salads they would get! "M'sieu," laughed one, "when I retire I shall eat—but not here. It is impossible!" They all had this dream. Well, Pétain offered it to them. And they turned it down.

That, in my opinion, is one of the most heroic acts in this war. For French Equatorial Africa, with its ghastly climate, is the most under-staffed, under-paid, unpopular billet in all the great French possessions. French colonial officials had to be paid a bonus to go there. At one time it was as high as 120 per cent. It was 100 per cent. up to this war. And in a territory four times the size of all France there were—aside from the military who administer most of the territory around Lake Chad—not many more than 600 white French officials in all Equatorial Africa.

The reason for its unpopularity is the climate, with its attendant and inevitable illnesses. Along that road I think I did not speak to one Frenchman who had not had malaria, or who was not visibly suffering from it at the moment—those sudden shivers, with the sweat breaking out suddenly all over his face.

"M'sieu," the Governor of Oubangi-Shari boasted grimly to me, "of the twenty men who came out with me, when I was young, to serve in Equatorial Africa—seventeen died here."

He had just been flown out from Paris to relieve the former Governor, who, at that moment, was lying on his face in his Residence, having his spine tapped to relieve the fluid in an heroic attempt to save him dying from dengue fever.

Then some of these officials are so lonely, with the hundreds of miles that lie between them, that they become *farouche*. They don't want to see anybody. That's probably the worst kind of illness. One of these, when he saw me setting up my camp bed on the clay verandah of the rest-house, said: "You will be eaten by leopards. A woman was eaten by a leopard on this road before you only a few weeks ago. But it doesn't make any difference to me." Then he walked off.

Service in Equatorial Africa is not the smart, gay, sometimes romantic life that it is in French North Africa. Nor do you have the cafés of those two glittering ports, Dakar and Casablanca. There are no clubs when you get into the equatorial "bush." It is, for most of these patient men, a one-man job. So I say, having seen them, I think these men who have willingly accepted exile from France—temporary or final—are possibly the most gallant Frenchmen I have ever seen.

For their bravery is not the act of a moment, or things done in company; it is just bitter resolution to stay out of France until they, and the British, can take it back from the Germans. And that's a long-distance courage.

On the other hand, life on the high tableland of the French Cameroons is not too intolerable. And what the French have done there is quite remarkable. There were only 400 km. of roads when the French were given the mandate in 1922—this, despite the fact that the Germans had had the Cameroons from 1885 to 1914. To-day there are 4,000 km. of all-weather roads, some of them the best in Africa. And there are another 2,000 that are perfectly good roads except in the rainy season. These roads are, for the most part, wide as an avenue, with deep drainage ditches on either side, built of red earth, and kept smooth as a boulevard. You gasp when you cross a river—your car on a raft of native dugouts—after the gullies and horrors of some of the roads in the French Middle Congo.

And while roads, as the intellectuals say, may not necessarily mean progress or culture in Europe or America, in Africa *they mean just that*. These amazing roads aren't for touring cars. They have been built to get out the coffee and the cotton which the French, with something akin to fury, have been forcibly cultivating these last years all the way up to Lake Chad. The cotton particularly.

These roads were built because M. Albert Sarraut, a former French Minister for the Colonies, said that civilisation must begin by roads. They came before education. This was in 1922 when he launched his great scheme whereby the colonies of France, all the great French Empire, were to be made to become complementary to French industry at home. Each colony, from the Cameroons to Indo-China, was studied to see just exactly what it was best suited to produce. Then its task was allotted to it; this was its future. It was a vast, comprehensive scheme, for which Sarraut demanded huge sums from the European French population. Those thrifty Frenchmen! Yet at the beginning of this war it was well under way.

As a result, aside from the strategic value of the broad belt of territory which now unites the Cameroons with the Anglo-Egyptian Sudan—completely dispelling the Axis dream of the Germans marching up from the Cameroons and the Italians down from Libya *to meet at Lake Chad*—Britain and the Free Frenchmen now have a valuable cotton supply.

Also, the French Middle Congo and the Cameroons are said to have the richest forests left in Africa. Driving through them, you can well believe it. The road through the Moyen Congo is often in semi-darkness from the vast jungle which towers on either side of it. Going down from Yaounde, the capital of the Cameroons, to the coast you seem to drop from the high tableland into a green hell, in which, among the towers of the iron-wood and the mahoganies and the dripping lianas, you seem to be plunging into ever deeper, greener depths. But you aren't falling; this is just the "high forest" rising above you. Then down by the sea are the cocoa plantations

Across hundreds of rivers—ferried always on these rafts made of native dugouts, with the paddlers singing—trails an everlasting stream of French motor-lorries. They are going eastward from Duala on the coast, up to the high plateau of the Cameroons, down into the Moyen Congo, across Oubangi-Shari to the borders of the Sudan—up to Lake Chad. They come back with coffee, peanuts, palm nuts—*and cotton*. They pass on their way through dozens of native villages, just built, their thatched roofs still green in the sun, where natives have been "put down" just to grow cotton.

The long river front of Duala when I was there was lined with ships from England, France, Germany, Italy—waiting for these cargoes. Now the last two are out of it. So are the scores of Scandinavian ships.

The British and the Free French Navy will hold the port of Duala in the Cameroons.

But when I was there in June, 1939, a French general had just lamented that the port of Duala could be captured by the passengers of any big German cruise liner. And so it could have been—then. I dare say it was one of the bright ideas, like the seizure of Oslo, that the Nazis did have in mind. But now that hole has been stopped. Duala will be used as a British naval and submarine base—now that the Frenchmen behind it have decided not to return home until France is France again. And that is at least one point which shows that the long-distance courage of the French colonial officials in Equatorial Africa has not been wasted.

The Governor of the Cameroons is a hot Socialist—and yet a vast admirer of the English "gentlemen" in colonial administration. He told me that the English "had a way with them." He smiled when he said he wouldn't attempt to explain what it was. But, he said, it worked. He was one of the first French African Governors to come out forthright against the Pétain Government's capitulation. For a time, in London, it was impossible to find out what was happening to him. We were told the pressure was so terrific the gallant Governor had wavered. Then comes the good news of the Cameroons lining up with the Free Frenchmen.

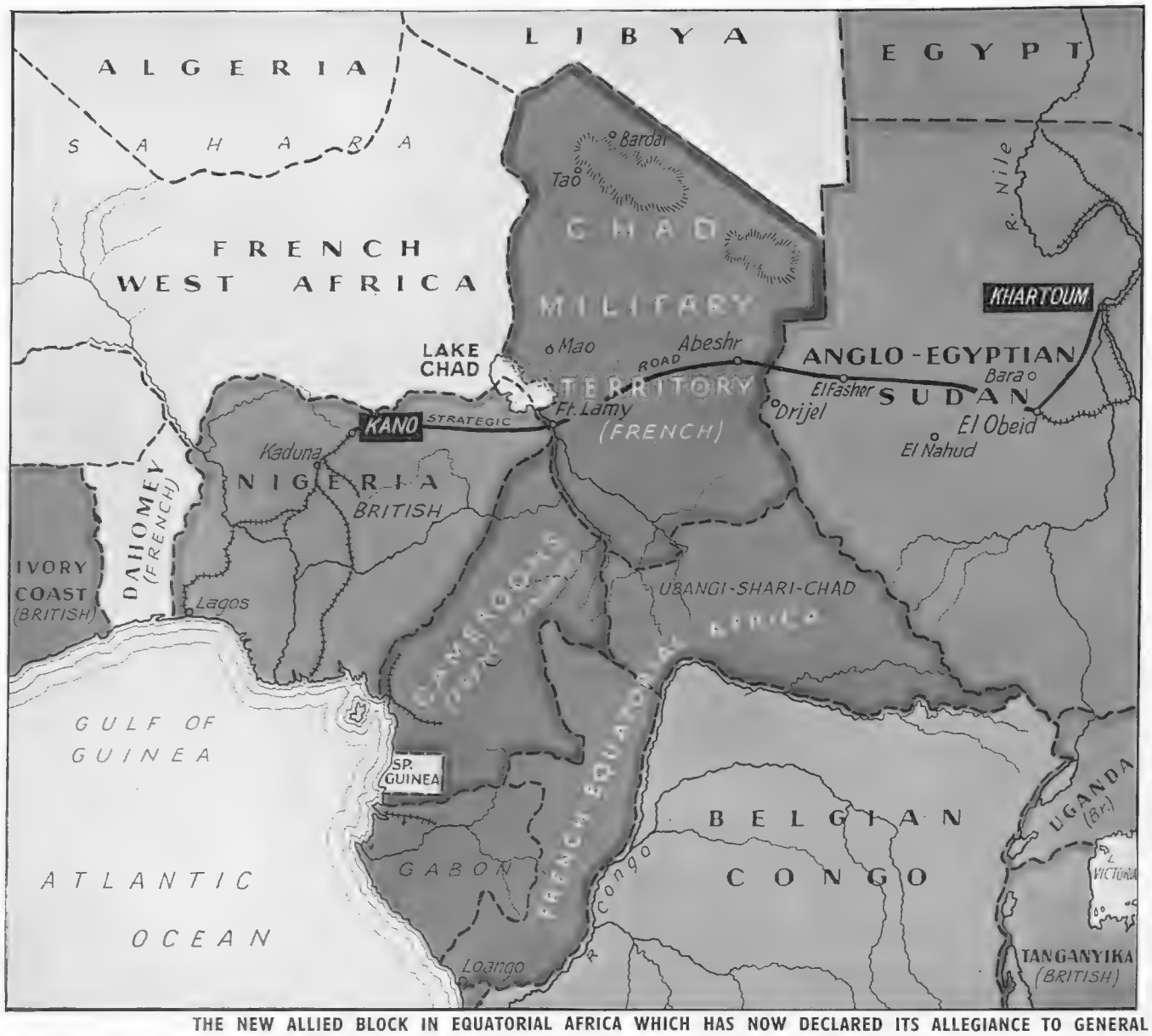
He is a very quiet, precise man, with no pomp—you don't have to go through an A.D.C. to get to him—and when I asked him what distinction did he think the natives of the Cameroons made between the French and their old masters, the Germans, Governor Brunot said icily:—

"The German Major Dominick dug trenches and burned the natives alive in petrol. And when he had to clear out, before the British, he hanged the King of Duala. That is history. These natives have memories."

This brought up a very interesting and important point; for, in Senegal, the Pétain Government—controlling from Dakar—still holds in its sway the finest black fighting troops in the French African service—the huge, ebony-black Senegalese. These Senegalese have had to face the peculiar choice between Frenchmen and Frenchmen—if they have ever been aware that there was such a choice. These happy-go-lucky African warriors will probably continue to be happy, so long as their pay and rations continue. It has probably never occurred to them that what they were unconsciously making was a choice between French and German domination. It is a strange situation, first because there never has been a choice—they are still under their old officers. Finally, except for a few who might have fought in the last war, a Senegalese soldier doesn't know what a German *is*. And the same goes for French Morocco.

When you realise this truth, then the decision of French Equatorial Africa to throw in its lot with the British and Free French takes on added importance. And here it seems—perhaps it is even now being tried—is the chance for a great propaganda-blow against the Pétain French now holding Dakar and Casablanca—a propaganda which will make an intelligent use of the native *élite* which the French have so assiduously cultivated in their administration of the Cameroons.

ONE OF THE PRINCIPAL PORTS OF ENTRY INTO THE HEART OF AFRICA: THE MODERN SEAPORT OF DUALA, CAPITAL OF THE FRENCH CAMEROONS, AND NOW UNDER THE CONTROL OF GENERAL DE GAULLE: Once belonging to Germany, Cameroon was constituted an autonomous territory under France and administered by a French Commissioner. The whole territory, with other large portions of French Equatorial Africa detailed on the following pages, has now pledged its adherence to General de Gaulle and will continue to fight against the enemy by the side of Britain. Duala is a fine, modern seaport; a floating dock and many fine homes make it a most attractive spot. Its trade hitherto has principally been with France, its chief exports being palm oil, ground nuts, almonds, hides, cacao, and ivory. Duala is the terminus of a railway to the interior. The native Bantu negroes are good agriculturists and keep the markets supplied with cereals and other products grown near the coast, while in the plateau regions stock-raising is the principal pursuit



THE NEW ALLIED BLOCK IN EQUATORIAL AFRICA WHICH HAS NOW DECLARED ITS ALLEGIANCE TO GENERAL DE GAULLE

In the centre of the map is the Chad military area, the first to announce its determination to fight on the side of Free France. To the south are the districts of the French Cameroons and French Equatorial Africa, which includes the Gaboon, Ubangi, and Shari provinces. With the Belgian Congo also friendly there is now a huge block of territory united against the common enemy. There are various routes crossing this area. The one we here deal with is the Kano, Fort Lamy, El Obeid to Khartoum road. The going varies very considerably as one moves from one district to another. The roadway is not much more than desert track in places, but it is always possible to keep up a steady pace in a car. Towards the south there are some very good roads through the Belgian Congo which link up with the Upper Nile. *On right*—The French Commandant's house at Fort Lamy with the Shari River beyond

SPECIAL SPHERE SECTION

FRENCH

THE ENTRANCE TO THE THRONGED CITY OF KANO: Kano, with its busy market, is a place of financial importance in Northern Nigeria. Its city wall, 38 ft. thick, is pierced by gateways. The wall is no longer maintained as in the days when it was a real and necessary defence

ON THE NIGERIAN SECTION OF THE KANO-KHARTOUM ROUTE: Here is a sandy stretch on the road near Nguru in Northern Nigeria. The surface consists of light sand and requires some careful driving and considerable patience. The road is flanked by masses of dom palms. Nguru, beyond Kano, towards Lake Chad, is the present inland terminus of the Lagos railway

THE secession of the Chad and Equatorial French Colonies from the Pétain Government profoundly modifies our position for the better in Africa, for it opens up a direct unopposed route between our West African Colonies and Protectorates and the Sudan. The railway from Port Sudan to El Obeid connects the Red Sea with Khordofan through which a fair road leads via El Nahud and El Fasher to the French Sudan. Thence it is possible to motor with reasonable ease across French territory to Northern Nigeria where railways extend from near the frontier at Nguru to the Gulf of Guinea. Road travel between El Obeid and El Fasher has been made easy and comfortable by the development of water resources since the end of the last war in 1918. Until wells were drilled and pump stations erected, long strips of waterless country forced most of the population with their herds to leave the nutritious grazing and migrate to the rivers or to the few water holes which gave somewhat precarious supplies at all seasons. The few inhabitants who remained, and travellers, relied upon water stored in the trunks of giant baobab trees, the interior of which was scooped out, giving space for the storage of 300 to 1,000 gallons. During rains, water collected in a pool at the foot of the trees was bucketed into the tree trunk and then sealed up with a plaque of clay until needed. Khordofan and Darfur are not barren deserts like the country south of Khartoum, for the higher rainfall of 30 ins. ensures a heavy growth of herbage upon which great herds of cattle fatten so long as drinking water is available in pools, but once these dry up and the hot weather sets in, the animals would die unless driven to the rivers or the widely-separated perennial water holes.

Sometimes the road crosses gum forests of thorny scrub acacias which yield gum arabic: at other times it follows broad grassy prairies or belts of drift sand over which progress is very slow and difficult. At times the track is hard red lateritic

(*Cont. on page* 336)

A SEAT OF GOVERNMENT IN NIGERIA: Government House, Enugu, is the administrative centre of the Northern Provinces. The building is well constructed in semi-European style

EQUATORIAL AFRICA: The Through Route from KANO to KHARTOUM, West to East, Opened Up by the Action of the French Central African Provinces

ON THE CROSS-CONTINENTAL ROUTE: This police post at Um Kedada in Darfur is on the old caravan route between East and West Africa now freely opened up. The Arabs water their camels there when on pilgrimage to Mecca. The Sudan rides—be it camel, ass, horse, or bull; whereas Nigeria walks; and it is a common sight between El Obeid and Kano to meet parties of pilgrims from the West, clad in the bright colours affected by the Hausas and equipped with bows and arrows, making their way on foot to Mecca, often taking five years to go there and back.

The secession first of Lake Chad military area, then the regions of French Equatorial Africa, the French Cameroons, and Gaboon from the Pétain Government has created with the Belgian Congo a huge "bloc" of allied territory running across Africa, almost from ocean to ocean. No projected advance from Libya to Fort Lamy becomes a reasonable possibility in face of the co-operation which will now result. "Though since the Franco-German armistice," writes a Cairo correspondent, "Lake Chad has been in hostile hands, air connection between Nigeria and the Anglo-Egyptian Sudan has been maintained by direct flight, and some aircraft have been permitted to break the journey at Fort Lamy. Air communication will, however, be much facilitated by the free use of the intervening landing grounds existing in the Lake Chad district which now becomes possible. Fort Lamy is a most important commercial centre, with an all-weather aerodrome. Most of the year it can be supplied from Nigeria, and it has river communication with the Congo." The restoration of the land connection is dealt with in detail in this section

THE MILITARY DISTRICT OF LAKE CHAD: This area is, from many angles, full of interest to the traveller. To the north there is an extraordinary mountain range, the Tibesti, which lies as a kind of barrier facing Libya. Kanem and Wadai offer ethnographic and ethnologic problems. Governmentally its central position is, of course, important. Several roads lead to Fort Lamy

A TYPICAL EQUATORIAL FORT ENTRANCE: Dotted along the main routes of French Equatorial Africa are these pocket forts with mud-walled gateways over which the tricolour has flown for several decades. Mongo is typical of many. Here, as everywhere on these roads, there is a strange mixture of ancient and modern modes of transport. It is good to think that the cordial relations of French and British will be resumed in these wide areas

TOUSSIDE (10,700 FT.) 150 miles from EMI KOUSSI

BARDAI Nerve centre of district & Oasis, Rich in dates

AOZOU

LIBYA

KUFRA OASIS & AEROPLANE BASE

LIBYAN DESERT

TIEROKA

TWIN CONES Dominate crater 18 miles in circumference

MODRA

Great Gorge of MASHAKESEY leading to summit of EMI KOUSSI (11,200 ft.)

Valley of the Mists

8 miles

KOHOR VENT 1000 ft. deep

MODOUNGA (Wells)

TIBESTI DISTRICT

Desert Country

THE TIBESTI MOUNTAINS Extend for 250 miles from East to West

BORKOU DISTRICT Palm groves (50 miles)

Palm groves

CARAVAN ROUTE between Borkou and Darfur.

FAYA headquarters of the Tibesti Borkou & Ennedi administrations

OASIS

Great rock bergs 400-500 ft. high

WATER SUPPLY ON THE KANO TO KHARTOUM ROAD: The problem of water is one which exists all along the road. In the Nigerian and South Sudanese sections this has been well met by the action of the British authorities who have dug wells at intervals, giving a regular supply at desirable points. A shaft is dug down to the water level, the width being some 3 or 4 ft. The lining of the shaft with cement is done as the diggers descend. The water, on occasions, gushes in strongly, necessitating a rapid removal of the workers

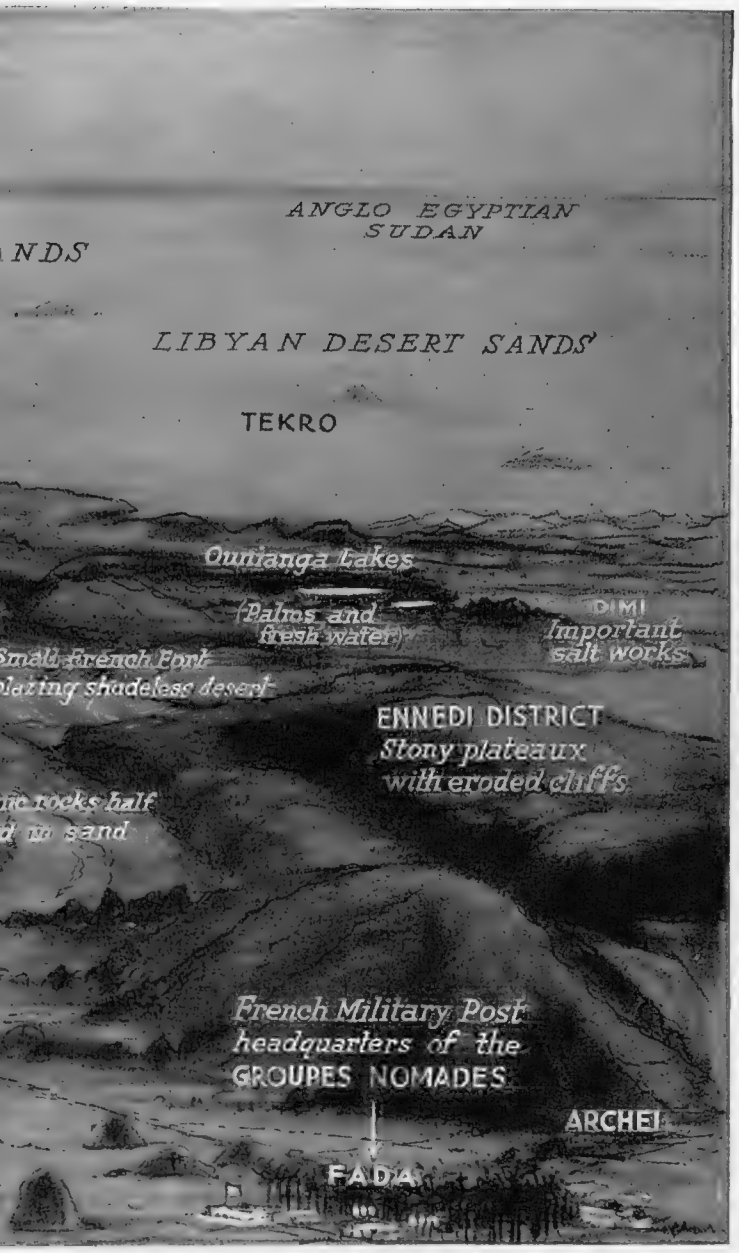
GABOON IS NOW ACTING WITH FREE FRANCE: After the lead given by the Lake Chad territory, French Equatorial Africa, the French Cameroons and the Gaboon Province all notified their secession from the Vichy Government. The Gaboon Province is watered by the Gaboon River with the town and port of Libreville at its mouth. Franceville lies at the head waters of the Gaboon. *On left*—Darfur or Khordofan Province is not as bare as one might suppose. In many places park-like country exists, as shown here

(Continued from page 334)

over which high speeds can be made by a motor-car. Scattered about are belts of baobab trees in the shelter of which caravans rest in the daytime, travelling being done in the cool of the night. Along the road are found simple rest-houses of thatched huts built by the Government for the use of travellers, but it is more usual to camp in the open under the stars without any tent or shelter.

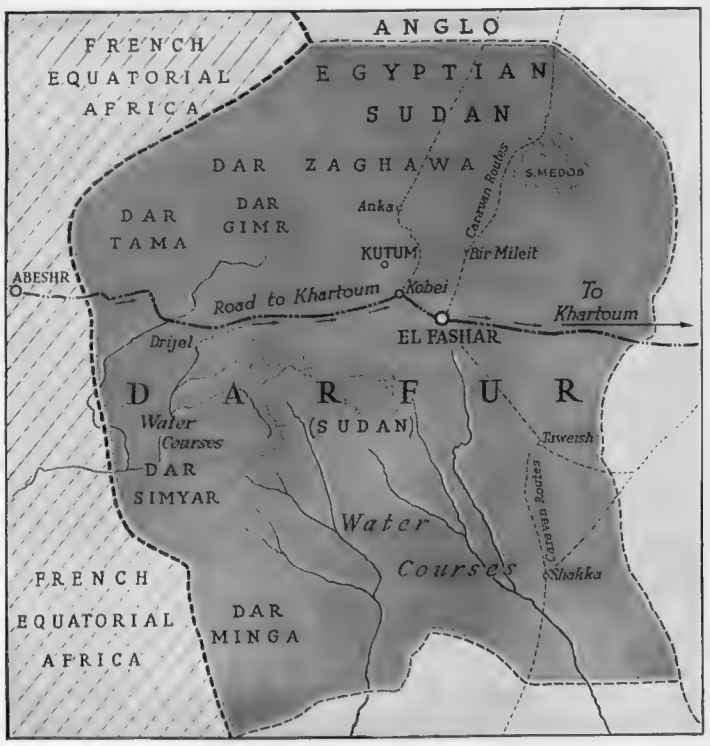
The journey from El Fasher to Fort Lamy presents no serious difficulties in the dry season, but once the rains fall, greasy tracks and swollen water courses compel stoppages. At French posts on the road supplies of petrol can be obtained. Once in Nigeria good roads as well as railways give quick access to the coast, petrol is freely available and an advanced Arab civilisation is met with.

Nguru, the northern terminus of the Nigeria railway system, has become a large market town mainly in consequence of the development of ample water in the district. It lies within an arid belt swept by strong winds causing numerous



THE LITTLE-VISITED TIBESTI RANGE IN THE CHAD ADMINISTRATION AREA: Separating the Chad Province from Italian Libya is an extraordinary range of mountains known as the Tibesti range. It contains two old volcanoes, with huge craters. Emi Koussi, the one in the centre of the above view, forms the highest point of the range. The slightly smaller cone lies away to the north-west. The whole region is very remote as regards European connections, although it is a very busy one for local caravan traffic, Bardai being a great camel track centre. Thousands of camels come for the rose-pink salt of the district. They pass through the valleys and the deep canyons and across the blazingly hot stretches of desert

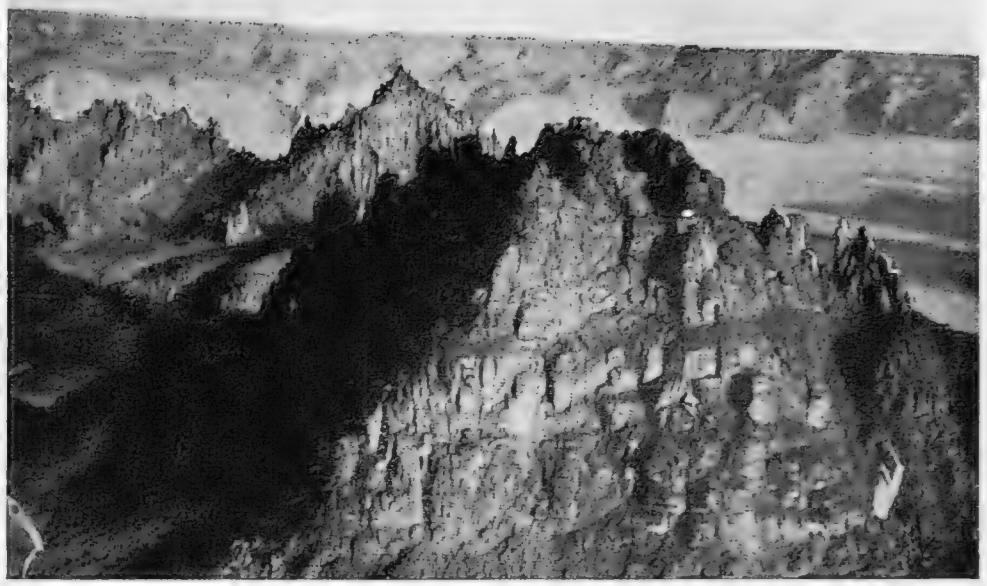
sand drifts that render travel difficult in places. The Chad basin is an arid sandy region, and Lake Chad is an inland sheet of water which receives the drainage of some 650,000 sq. miles of territory and the flow, when in flood, of several important rivers, but the rainfall is so low and the evaporation so high that its depth varies with the seasons from 3 ft. to 15 ft. and its area from 3,000 to 8,000 sq. miles. Lake Chad is indeed little more than a gigantic swamp surrounded by a broad belt of rushes and reeds. A. B. T.



THE ROAD THROUGH DARFUR TO KHARTOUM: El Fasher is a fairly large town, and is the meeting place of several caravan routes. El Obeid, the rail terminus for Port Sudan, lies just out of the map on the right. All the streams drawn here flow away southwards to the Bahr el Arab during the wet season. The water ultimately reaches the Nile

SPECIAL SPHERE SECTION

FREE FRANCE IN EQUATORIAL AFRICA: The Strange Mountain Barrier in the Lake Chad District which Confronts Italy's Libyan Territory, and Other Areas now with De Gaulle



JAGGED ROCK SCENERY IN THE TIBESTI MOUNTAINS: The Tibesti mountains exhibit some fantastic formations: the highest mountain is an old volcano with cliffs 1,300 ft. high. In places the rocks rise into serrated ridges as shown above. Mr. Ernest Thesiger climbed these mountains in 1938; we are indebted to his narrative for details appearing in this bird's-eye view

WATER STORAGE EXTRAORDINARY ON THE KANO-KHARTOUM ROAD: This baobab tree in its bare dry-season garb contains stored-up water for use during the dry season. During the rains water collects at the foot of the tree in little pools. These are emptied from time to time and the water poured into the trunk which has previously been hollowed out for this purpose. When filled, this strange reservoir is then sealed with a slab of clay

LABOUR SUPPLY AND THE CENTRAL REGISTER

The Second of a Short Series of Articles Dealing With the War-time Work of the Ministry of Labour

By GORDON BECKLES

MR. ERNEST BEVIN must look out of his windows at Montagu House with mixed feelings, for the view admirably symbolises the Ministry of Labour's record.

In the Whitehall foreground still stand the shabby "bungalows" of 1917, shored up now, not against bombardment but imminent senile collapse. No money wasted here on grand buildings during the years when millions were out of work. And yet? Had this good-intentioned policy not been pursued, public money would now be saved on high rents being paid for Ministry space in other office buildings.

Mr. Bevin can certainly say that his own room is well in the picture. It is a large and austere salon on the first floor of the former London home of the Dukes of Buccleuch. The leather top of his desk is scratched and torn. A sombre oil-painting of the Reverend John Maurice, first principal of the Working Men's College in 1854, gazes down on the desk with its crimson dispatch box on right and four telephones on left. From this room Mr. Bevin directs an army of workers.

That is Mr. Bevin's task. Not just to find jobs for unemployed so much as to direct the right worker towards the right employer. The problem of labour supply is thus divided into two parts: (1) War-time industries and heavy export trades; and (2) the rest.

Decentralised (like everything in this Ministry) the administration spreads outward from a small Labour Supply Board in London, through Divisional Controllers, Local Labour Supply Committees and Employment Exchanges. It doesn't look easy, but it works. In practice the supervising work of the scheme is done by about 250 Inspectors of Labour Supply, permanent officials selected for their specialised knowledge of various trades.

Their approach to their task falls into three parts. First, is a factory's demand for extra workers both true and justified? Secondly, is a factory's labour being used economically? Thirdly, is a factory's defence against having its workers transferred equally justified? Labour for munitions has got to be found; but in finding it it is necessary not to disturb but to safeguard the essential services, e.g., electricity, gas, transport, exports, etc. So that when transfer is necessary it must be accomplished in such a way as to cause as little dislocation as possible, while at the same time seeing that every employer is using labour at its maximum efficiency.

Apart from the normal Ministry machine, there is also a small flying squad of special investigators answering directly to the heads of the Ministry in Whitehall. Factories which are found not to be using labour economically are investigated. Others who, without justification, invoke the Ministry's powers for the transfer of labour have their demands cut down or eliminated. One case which actually reached the desk of the head of one department the other day was that of a factory which cried for a coppersmith, got him, gave him nothing to do, sacked him, cried for a coppersmith—and so on. That factory needed some firm words of authority.

Thus, with a firm and guiding hand, the national war effort is being directed towards the maximum output. Yet because it is a democracy still, there must be a minimum of legislation and coded instructions. It may be called "Bevin's Army," but there must be no parade-ground tactics. A good instance of the personal approach to employers (also showing how the machine works by being reduced to small units) is to be found in this appeal sent out in August, above Mr. Bevin's signature:

"At this time it is vitally important that all labour engaged upon essential munitions production should be fully employed. The managements of all firms concerned are therefore requested to notify the nearest local office of the Ministry whenever it is anticipated that ten or more of their workpeople will be on idle time, suspended or discharged."

The much-discussed Central Register is an interesting microcosm of what is happening on this more wholesale scale. This is the *corps d'élite*, the national service effort of the professional man which began to be compiled on a voluntary basis just after Munich.

Its inspiration came from the last war, whose closing years gave to the world a demonstration of the amazing brain-power resources of the British Empire. The famous Admiralty code room, as most will recall, was largely staffed by senior wranglers with cross-word puzzle minds. There were hundreds of other instances. A noble and rich scientist of German descent had the peculiar peace-time hobby of collecting and studying fleas.

He may, or may not, have ever guessed that one day his energetic little pals would prove a valuable ally in combating trench fever. But thus it proved. Another case of a man's hobby proving of national service concerned a certain don's obsession with the Odyssey and Greek mythology, on which he had theories which were re-enforced by a close study of the Hellespont tides. This knowledge was one day to lead to his appointment as staff officer of the mine-sweeping fleet during the Salonika operations.

So, when the Central Register was projected, the Royal Society added to the qualifications on the registration form for its own members their hobbies. This idea has since been incorporated on the standard card.

The Register stands now at about 125,000, to which will shortly be added about 50 per cent. of the 100,000-odd engineers, chemists, scientists and physicists who have now been compulsorily registered, and are being sorted by their respective panels. Each profession has its own panel to judge on the merits of the men registering.

Over 7,000 men have so far been placed in war-work posts. Some have criticised this figure as being too low and indicating a lack of enterprise on the Register's part. The matter has even been spoken about disrespectfully in the House of Commons. Such criticism is based on a faulty conception of the Register's functions. The Central Register is not a job-finding agency. Most of the people on the Register are already in employment.

The motto of the men in charge of the Register is: "Men for jobs—not jobs for men." An intelligent manipulation of cross-indexing systems and a careful vetting of the experts registered is their paramount aim in order to secure the best use of the specialised knowledge available.

There are now spaces for seven different languages on each registration form, with sub-divisions of "print," "ordinary handwriting," "speak" and "write." There are the expected details about experience, salary, qualifications, state of health and other services to the Government. Books of words are supplied to all employers interested, giving full explanations of how to use the Register. A great number of famous names are, of course, on the files: helminthologists, biochemists, authors, physicists, metallurgists, and plasticity experts. If anyone wants a forty-year-old research psychologist who can write Sanskrit, talk French and Portuguese, but has a Swiss-born father the Register feels fairly sure that it can produce just the man you want in a hour or so.

A job for a rat destroyer at £500 per annum is among those which have been handled by the Register. These are only some of the schemes which are grafted like war-time embroidery on to the Ministry's main fabric. Many are the result of brilliant improvisation and made to work with careful and intelligent administration. The Civil Service has many critics but here, at least, is one proof of its adaptability and flexibility under the drive of so powerful a motive power as Mr. Bevin's.

THE MEN WHO ARE CONSCRIPTING THE LABOUR OF THE NATION: THE FIRST MEETING OF THE LABOUR SUPPLY BOARD AT THE MINISTRY OF LABOUR IN WHITEHALL

The decision to conscript Labour was a momentous step in the history of this democratic country. How this process works in actual practice is described in the accompanying article. The above picture, taken on the occasion of the first meeting of the men who are carrying out this onerous task shows the following: Left to right—Sir Thomas Williams Phillips, Permanent Secretary at the Ministry of Labour since 1935; Mr. F. W. Leggett, C.B., Under-Secretary at the Ministry of Labour since 1939; Major-General K. C. Appleyard, a very important industrialist in the North-East; Mr. J. C. Little; Mr. Ernest Bevin, Minister of Labour since May last and Chairman of the Board; and Mr. F. N. Tribe, C.B. (standing on right), Principal Assistant Secretary, H.M. Treasury, since 1938

Drawing by Montague Dawson

ONE OF THE TRAWLERS HITS BACK—H.M. "ARCTIC TRAPPER" BRINGS DOWN TWO ENEMY PLANES AND DAMAGES TWO OTHERS

Arctic Trapper is now one of that fine fleet of vessels—His Majesty's Trawlers. Whilst on patrol recently she was machine-gunned by enemy fighters who were escorting a force of German bombers. In return the trawler opened fire on the bombers: the first shell burst between two of them and it is probable that both received damage. The second shell scored a direct hit on another bomber which crashed into the sea. The third shell burst very close to another plane and this was seen to turn over and come down in the sea. There were no casualties on the trawler

The FINE WORK of the BRITISH TRAWLER FLEET

Whose Numbers Have Been Augmented by the Vessels of Other Countries

ONE of the war's great disappointments for Germany is that Britain continues to get a steady supply of fish at a reasonable price, and the situation has, in fact, improved considerably during the last few months. If they were allowed to read them, the Billingsgate reports of weight and price, published regularly, would be a revelation to the people. The decline in the British fishing population in the years preceding the war was given full prominence in the German naval and economic press and the Navy held the opinion that if we used our trawlers, drifters, and skilled fishermen for minesweeping and chasing submarines there would be no fish caught, while if the material and personnel were used for fishing the boats would be very rapidly destroyed.

The Admiralty was fully alive to the situation—and the difficulties—and took all possible steps well in advance. The service wanted large numbers of fishing craft and fishermen, and they have both confirmed their wonderful reputation of the last war, but the selection has been very carefully made and where possible vessels with special fishing functions have been left to the industry, or at least a proportion of them, while the inshore and other neglected fisheries have been revived and many vessels brought out of the laying-up berths. They have not all been able to fish their accustomed grounds and they have often been forced to change their methods, but they have been catching badly-needed fish.

Of our own fishing fleet, however, it is obvious that only a proportion can remain in the industry; the Navy's demands are colossal and have been fully justified by the results attained. But when things seemed most serious and a real shortage was to be expected, it was Germany who supplied the relief and assured us of a steady supply. Each unjustified invasion of peaceful neutrals sent a host of fishing vessels across the North Sea to British ports. Norway, Holland, Belgium, and even Denmark contrived to get away large numbers of boats before the Germans closed their ports, and practically all of them reached safety. Sometimes they were out on the fishing grounds and received warning by wireless that it was unsafe to return, but more often they left their shores packed with refugees.

A HERRING DRIFTER FIGHTING HEAVY SEAS as she manœuvres into the safety of harbour with her cargo of fish, on the East Anglian Coast

SECURING VITAL FOOD SUPPLIES FOR BRITAIN: Trawlermen "shooting" the nets on an ocean-going vessel. These nets stretch for 2 miles

WHEN TRAWLER MEETS MINESWEEPER: Out on the ocean a fishing trawler comes alongside and exchanges a basket of fish for a few packets of cigarettes

Finally France, which possessed a particularly large fishing fleet, supplied her full quota During the evacuation of Dunkirk scores of the little diesel-engined luggers, the descendants of the romantic *chasses-marees*, brought civilian and military refugees to the Kentish coast, and when French resistance collapsed the Breton fishermen, most independent of all Frenchmen, also came to this country. All these victims of German aggression are now supplying the British market and are well satisfied with their profits, although many chafe under the defence restrictions.

Another important source of supply is the Western Atlantic, whose prolific grounds have supplied salted fish for generations. Only within the last few years has it been discovered that fish, with the proper treatment, can be frozen as satisfactorily as meat, but the treatment is quite different. It has to be brought down to a very low temperature as rapidly as possible, then the flesh remains firm and unbroken by the formation of ice particles in the tissues, and when it is carefully thawed its texture and flavour are quite as good as most of that which comes from Iceland or the Arctic grounds.

ANTI-AIRCRAFT DEFENCE

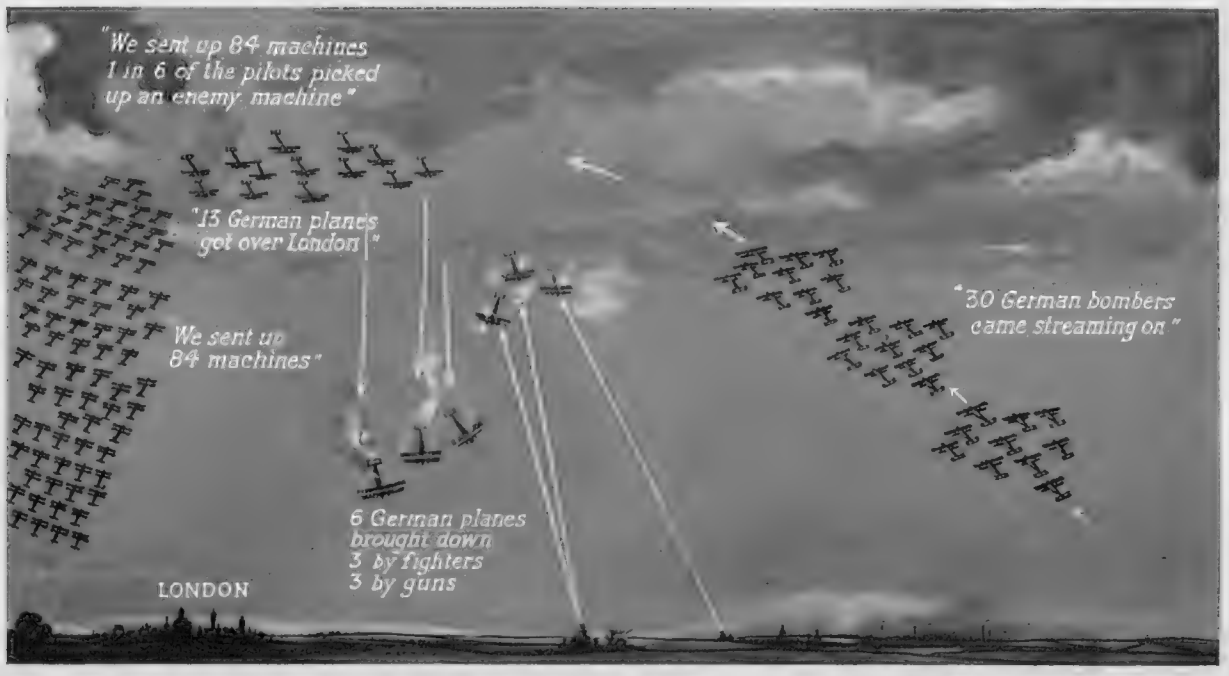
The Wonderful Equipment Which Is Beating the Enemy Raider

WORKING WITH THE SEARCHLIGHTS AND GUNS ARE THE SOUND LOCATORS: Like the searchlight, this instrument too has been the subject of intensive research. So sensitive is it that the listeners have to be taught to differentiate between aircraft a long way off and minor local noises. The huge listening ears are fully controllable and can be turned to face in any direction. The task of the raiding aeroplane by night is certainly becoming more difficult—because, although it cannot always be seen, instruments such as those pictured above and below are now being developed very quickly. Before very long the defence of a large city should become even more efficient than it is to-day

THE MODERN SEARCHLIGHT IS A WONDERFUL APPARATUS: During the past few weeks we have had ample opportunity of witnessing the superb efficiency of our searchlight barrage. The job of these latest scientific wonders is to illuminate enemy aircraft for the R.A.F. fighters and A.A. guns. The chief difficulty is in the pick-up—once the raider is caught he is "handed" on from beam to beam and receives continuous attack. The modern searchlight represents a great amount of intensive scientific research: it can be traversed like a gun turret; its beam can be raised or lowered; owing to the great heat generated it can be ventilated by fan (seen in the above picture); and it can be switched on or off instantly

"THE SPOTTER" AT THE SEARCHLIGHT STATION: In 1918 it is estimated that it required 5,000 rounds to bring down an aeroplane: in 1940 this figure is considerably less. There are three principal groups of A.A. guns to-day—the 3-in., 3.7-in. and 4.5-in: they have had a very great number of successes both with snap shooting and barrage fire. Before the barrage can be put up with effect it is essential that the exact position of the raiders be known—it is here that the importance of the "spotter" arises

THE "PREDICTER" OR "SAUSAGE MACHINE"—THE LATEST SCIENTIFIC DEVICE AGAINST RAIDING AIRCRAFT: Describing this wonderful instrument an American correspondent recently said: "Pointing is done not only by searchlights but by an ingenious range and course predicter which the British call a 'sausage machine,' and by other equipment of a nature kept closely secret. It works something like this: with secret devices A.A. gun crews determine the position and direction of the approaching raider. They feed this data to the 'sausage machine,' which turns out a series of positions of the plane. In a split second these positions are subjected to heavy fire." In the picture above of one of these wonderful new predicters at work are seen Gunner R. J. P. Eden (a relative of the War Minister) and Gunner R. B. Lynn (on right), son of Mr. Ralph Lynn, the actor



THE LAST ATTEMPT BY THE GERMANS TO BOMB LONDON IN THE GREAT WAR: THE GREAT AIR BATTLE BY NIGHT ON WHIT-SUNDAY, MAY 19, 1918: In the first quarter of 1918, in five raids, there were eighteen combats but only one Gotha was brought down. On Whit-Sunday, May 19, the Germans made their biggest effort but so disastrous was it to them that it was the last attempt of the Great War to bomb London by night. "Between thirty and forty bombing machines were employed," writes General Ashmore. "During the raid, twelve combats in the air resulted in the total destruction of three Gothas; in addition, three Gothas were shot down in flames by the anti-aircraft guns and another had engine failure and landed in Essex." With the three which crashed in Belgium on landing, this night cost the enemy ten machines. We sent up eighty-four machines, about one in six of the pilots picking up an enemy machine. Thirteen enemy machines managed to reach London, however. The damage done was rather over £130,000, and the expenditure of ammunition from the defences was over 30,000 rounds"

A Page From History

NIGHT FIGHTERS in the GREAT WAR

The Bombing Attacks On London in 1917 and 1918

SOME useful data in connection with the problem of fighting off night bombers is to be found in the records of the defence of London against air attack during the last war. In his book, *Air Defence*, published in 1929 by Longmans, Major-General E. B. Ashmore gives some highly interesting details; he was in command of the combined methods of defence of London during 1917 and 1918.

When this Defence Area was established on July 31, 1917, it was realised that night raiding by aeroplanes would have to be faced in the near future, and in several chapters of his book General Ashmore records the appearance of the night raiders and of the means which were successfully taken to counter them.

It may be said at once that it is inherent throughout General Ashmore's narrative that the night fighter is the ultimate destroyer of the invading night bomber. The essential work of the observers and listeners, of the searchlights, and of the anti-aircraft barrage is in no way minimised; they are regarded as essential adjuncts, but they all lead up to, and support, the final task, so the General maintains, of the night fighter to find, and destroy, the invading enemy craft.

Another important point which emerges in the narrative is that a certain amount of loss induced the cessation of a certain form of attack. Too many Zeppelins were brought down; Zeppelin attacks ceased. Too many day raiders fell to the London defences; daylight raids ceased after the 12th and 22nd August, 1917.

About this time General Ashmore learned that the German Third Bombing Squadron was busy practising night flying, and on September 4 came the first night raiders against London. How was the attack to be met?

The first attempts to find the enemy were unsuccessful. When sixteen machines of the R.F.C. went up into the night they saw nothing of the enemy, but at the same time the then important discovery was made that the Sopwith Camels, the efficient fighting scouts, could be used successfully at night. Night landings were successfully made by this type. At first just a handful of these scouts would go up and in a short time conjunction of effort with the searchlights, which were improved at this time, enabled pilots to find the areas in which the enemy was flying.

A period of perfect weather for the invader ensued from September 24 to October 1, of which the enemy took full advantage, coming in over Essex, at an angle where they could get the moonlight over the river. This became a favourite point of entry, the barrage guns doing good work in breaking up the attacks. Then cloudy weather ensued. Enemy machines had been driven off but not destroyed. Only two could be claimed as having been definitely brought down. The enemy began to employ some heavier bombers.

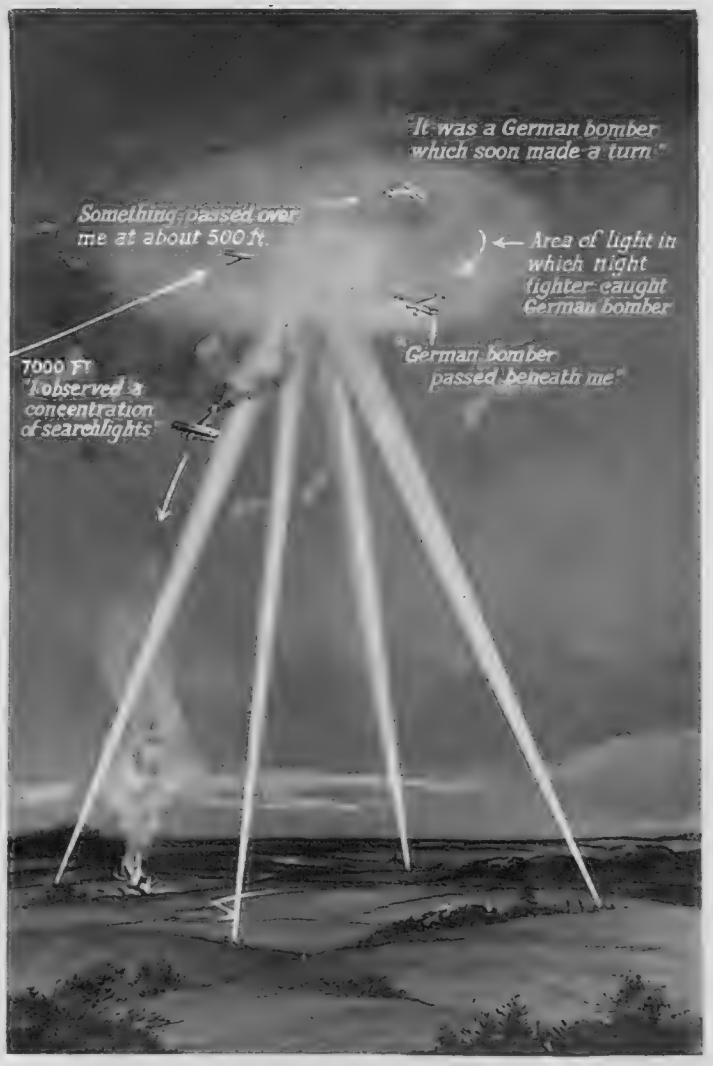
During a raid on December 18, a bomber was hit by one of the British night fighters. One of the engines of a Gotha was hit, and it fell into the sea near Folkestone. (The commander of the German Third Bombing Squadron was himself killed by anti-aircraft fire during that month.) During the latter part of the year the defending machines had, on occasion, been able to *see* their enemy, and a few combats had resulted.

The squadrons were sent up on patrol lines at four different heights, 8,000, 9,000, 10,000, and 11,000 ft., waiting for the enemy. It was only with the extension of the wireless telephone that the ground observers were able to communicate at all with the fighters. With the turn of the year the successes of the fighters grew more numerous. A big giant enemy bomber was picked up, on its way home, by two British pilots. It was brought down in flames over Essex.

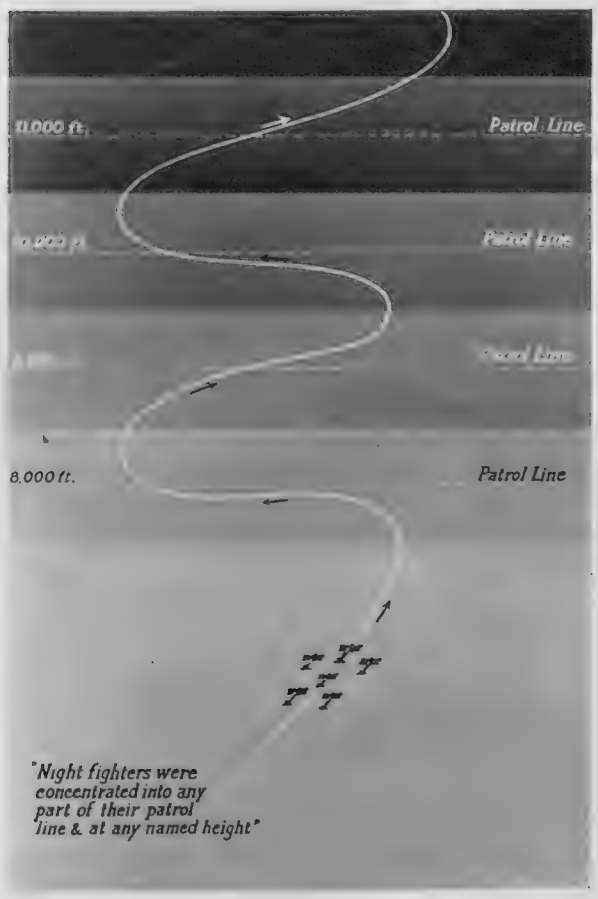
During the opening months of the year 1918, the pilots were doing their utmost to find their enemies, and it was the improvements in the searchlight which ultimately gave them their chances. Although contacts with the enemy by no means always resulted in the destruction of the enemy craft it was learnt from German sources that the enemy pilots had, by this time, learned to fear our defending machines more than our gunfire.

On Whit-Sunday, May 19, the Germans made a massed attack which had been expected but, although large, its numbers did not reach those which Whitehall had envisaged. Twelve combats in the air resulted in the total destruction of three Gothas and three more of the enemy were probably badly injured. It was known subsequently that three machines crashed on their return to Belgium. Three Gothas were brought down in flames by anti-aircraft fire. We had sent up eighty-four machines—about one in six of the pilots picking up an enemy. All our machines landed safely, only one being damaged by enemy fire. Out of some thirty to forty machines, six of the enemy were definitely shot down, and it would appear that the general harassing of the invading force by fighters and gunfire convinced the Enemy's High Command that it was not worth while to continue attacks upon London.

The night of May 19 was the last upon which London was troubled by night bombing.



THE AIR BATTLE OVER SANDWICH DURING THE BIG ATTEMPT TO RAID LONDON ON MAY 19, 1918: Captain C. J. Q. Brand (who later became Sir Quintus Brand of South African fame) was on patrol above Throwley Aerodrome when he observed a concentration of searchlight beams east of Faversham. "I arrived over this vicinity still climbing," he wrote, "my height being [something over 7,000 ft. The concentration of lights, about four in number, was searching just north-east of me; and, while looking in their direction, something passing above and to my left caught my attention. It proved to be a twin-engined machine about 500 ft. or so above me. I turned to engage the enemy aircraft (whose identity was perfectly definite) by approaching from his rear and below his own height. His rear gunner opened fire. I immediately returned his fire, and a subsequent burst apparently put his starboard engine out of order. Soon after my opening fire the aircraft burst into flames, which also enveloped my own machine for an instant. The aircraft fell to earth in pieces over the South-East side of the Isle of Sheppey"



HOW THE NIGHT PATROLS OF FIGHTERS WERE CARRIED OUT: The balloon "aprons" (from which a curtain of wire descended to the ground) were installed round the Eastern part of London, and were put up to a height of 8,000 ft. "The ceiling of the bombers, when loaded at night, was not much over 11,000 ft.", writes Major-General Ashmore. "Each of our squadrons sent up machines on ten-mile long patrol lines, across the most probable lines of approach of the enemy. The patrols were at four heights—8,000, 9,000, 10,000 and 11,000 ft."

BATTLE TACTICS OF THE AIR

Further Drawings Showing How Aerial Strategy is Being Evolved in the Battles Now Being Fought Over Britain

VERY PRECIOUS AEROPLANES! HUGE FOUR-ENGINED BOMBERS, HEAVILY GUARDED, APPEAR OVER KENT: Probably Focke-Wulf Condors—passenger planes converted for military use: or possibly Junkers 90—big troop carriers. Their speed is about 230 to 240 m.p.h., and they have a long range with a heavy bomb load. They were strongly guarded by Messerschmitt 109's and also by the new twin-engined Messerschmitt Jaguars—proving that the enemy was taking no chances of losing his new aircraft!

THE DIAMOND-SHAPED FORMATION OF BOMBERS: This is a formation which has been much favoured during the past few weeks. The slower-flying bombers have been accompanied by a loose escort of fast-flying fighters keeping guard on the flanks, whilst other escorts have hovered up aloft ready to pounce when necessary

FLYING IN A DENSE "VIC," BUILT UP OF SMALLER "VICS" OF THREE EACH: In some cases—so determined have the Germans been—escorts of as many as seventy-five fighters have been provided for a squadron of fifteen bombers. Here we see a roving fighter escort bringing over a heavy concentration of bombers. These are flying in groups of three in spearhead formation

Drawings by E. G. Lambert

TRYING TO OFFSET THE EFFECT OF ANTI-AIRCRAFT FIRE: These bombers were flying much wider apart recently as a precaution against the accurate ground fire. One witness stated that he counted twenty-two bombers in one formation: the clouds of escorting Messerschmitts above them were too many to count

In the issue of "The Sphere" of August 24 we published a series of drawings and notes describing how Aerial Strategy is at this moment being evolved; our illustrations showed some of the known formations which the enemy was then employing. Here we present a further series of drawings showing later developments in Battle Tactics, together with a few actual photographs. The latter are, of course, very difficult to obtain—mainly owing to the great height at which the various enemy formations fly when over Britain: nevertheless, they do convey to the average man in the street—straining his eyes from the pavement—some idea of what is happening thousands of feet above his head

ONE OF THE MOST REMARKABLE PHOTOGRAPHS YET TAKEN OF THE WAR IN THE AIR

This picture was taken actually over the South-East Coast as a formation of Nazi planes were attempting to push on to London. Although only a score of planes can be counted here, there were actually fifty-seven enemy aircraft in the sky when this formation came over. The small group of three at the bottom are fighters—only a few out of a much larger number—who were escorting the bigger bombers flying in formations of threes and fours. The white puffs are the exploding shells from the anti-aircraft barrage: the accuracy of the fire from the A.A. guns is evident. There is no doubt of the superiority of our defences during the daytime; although the enemy has reached certain objectives on occasion, and although London has been severely bombed at night, in the daytime the combination of A.A. gun barrage and R.A.F. fighter has definitely demonstrated its value

THIS PICTURE WAS TAKEN FROM A FLEET STREET ROOF: These planes were actually observed from the windows of a newspaper office in the centre of London

NAZIS IN FULL FLIGHT: Here is a section only of the largest formation of German bombers yet seen: they attempted an attack over the East Coast on September 3. There were 120 Dornier bombers and these were escorted high up in the clouds by Messerschmitt fighters. The reception was so warm that the bombers had very little hesitation in turning for home—which is what is happening when this picture was taken

Drawing by Roland Davies

A BRISTOL BEAUFORT LONG-DISTANCE FIGHTER BRINGS DOWN ONE OF THE LATEST MESSERSCHMITT FIGHTER-BOMBERS OVER NORWAY: Of recent weeks we have been reading much of the latest German fighter-bomber, the Messerschmitt Me 110: despite its comparative newness, however, our own well-tried aircraft are proving more than a match for the newcomer. Over Kent and Surrey a number of them have been destroyed by Hurricanes and Spitfires: the type has also been encountered over Norway—in this case by a Bristol Beaufort, as depicted above. The latter—product of a famous firm in the British aircraft industry—is capable of fulfilling the functions of a bomber, general reconnaissance and general purposes land plane: it was not primarily intended solely as a fighter. The Me 110 is, however, definitely a fighter—with a crew of two. Although heavily armed with two cannons and four machine-guns it has not made a very good showing. In spite of its top speed of 365 m.p.h., dozens of the type have been shot down—even by Ansons! Of late the Me 110 has been used in large numbers to escort bombers across the Channel

A PICTORIAL IMPRESSION OF AN ATTEMPTED NIGHT ATTACK ON LONDON

Drawing by Roland Davies

A large force of the enemy have reached the outskirts of the capital: it is impossible to carry out low, precision bombing or machine-gun attacks owing to the balloon barrage which is now operating with very great efficiency indeed. The main force of the enemy's bombers have been turned back on the outskirts owing to the fierce anti-aircraft fire; but a single raider which has managed to detach itself from the main body has got through, and is being held in the beams of the searchlights. Either he will be turned back by the gunfire or will fall a prey to the waiting British fighters. Away on the right, above the clouds on which another searchlight concentration is playing, is another single raider exploiting his nuisance value. He is flying high—probably five miles up—and keeping over the London area for as long as possible.

AIR COMMENTARY BY CHARLES G. GREY (Founder of "The Aeroplane")

THE THEORY OF AIR BOMBING

Notes on Germany's New Colossal Bombers and their Implications—"We Ought to be Able to Build Several Spitfires from the Result when it has been Ironed Out a Bit. . . ."

IF one may believe newspaper reports, which are not always reliable, the Germans seem to have been trying out some of their big four-motor bombers in their attacks on this country. If Air Ministry statements have referred to them at all they have been singularly unspecific, but then, Air Ministry statements always are unspecific, to the point of dullness and drabness.

If the big four-motor jobs have been there, we may assume that some of our enterprising fighter pilots have been to have a fairly close-up look at them; and if so, we might have expected that the Air Ministry publicity people would have given an expectant public, who, after all, pay their wages, as well as the still more important readers in the R.A.F. itself, some fairly detailed description of the armament of the big fellows.

People on the inside of aviation know pretty well what the aeroplanes themselves are and various enterprising newspapers have published silhouettes of the two of which we know, namely the Focke-Wulf Condor, and the Junkers Ju 90. Bloehm and Voss, the great ship-building firm, have built some also. And in 1937–38, Dr. Claude Dornier built quite a good one, but was told not to go on with it, but now, I have been told, he has started building more of it.

Personally I do not believe in silhouettes. One never gets an aeroplane, just when one wants to recognise it, either in perfect plan view, end view, or side elevation. Moreover, lots of aeroplanes look like others in one or other of those views, and yet each has a distinctly recognisable personality at some odd angle.

Anybody who is in the habit of watching aeroplanes knows that you can keep an eye on a machine for quite a while, wondering what it is, until it happens to turn at some angle and you recognise it at once, but it is not a bit like its silhouette. So I am rather inclined to agree with an Archie-gunner friend of mine who referred to—"Them silly-wet things."

There will be interest in seeing whether the Germans use these big crates regularly. Whether they do or not, there will be a lot of credit coming, and I am afraid a lot of publicity too, to the pilot or crew who is or are the first to shoot one down in this country—because I am sure that my friends in the Armament Department of the Air Ministry want to see what their armament is—that is most important.

The Germans started building multi-engined aeroplanes quite a long time ago. Dr. Claude Dornier built that colossal twelve-engined flying-boat ten years ago. And the Field-Marshal von Hindenburg Junkers must be about that old also. Some readers may remember that big Junkers coming over to Hanworth Aerodrome just about the time when the Zeppelin landed there.

Then, a matter of four or five years ago, somebody in the German Air Ministry was bitten by the same bug as Mr. Bill Boeing in the United States, who produced the Boeing "Flying Fortress," the finest flying target that was ever put into the air, and so very vulnerable.

A lot of our people in the Air Ministry here were similarly bitten, and began to talk, not about "flying fortresses," because at any rate they knew better than that, but about high-level sub-stratosphere bombers with pressure-pumped cabins which would fly above the range of anti-aircraft guns or the possible ceiling of enemy fighters, and would carry tons of bombs apiece to be deposited when and where they wished.

All of which sounds very good but does not allow for the fact that if one tries to bomb from somewhere about 30,000 ft. the bombing must be pretty promiscuous. However much alarm and despondency it may cause it cannot do as much real military damage as is done by the bomber who pokes his nose down into the target and drops a bomb from about 500 ft. with a 30-sec. delay-action fuse.

Naturally, if one is going in for bombing for the sake of terrorising, then dropping a bomb which weighs two or three tons into the middle of a city may have a military effect, if one accepts the doctrine, which I admit is logical, that in an all-in war, men, women, and children, civilians, soldiers, sailors, and airmen, munition workers, war profiteers, and everybody else are all fair military targets.

But, until one reaches that state of logical savagery, and so long as one sticks to the old sentimental idea that bombing should be confined, within the limits of a fairly elastic conscience, to military objectives, then the high-level sub-stratosphere bomber is not only tripe as a military apparatus but it is a waste of good material and of good men, which might be applied to the destruction of military objectives in enemy country or to the destruction of enemy aircraft in our own country. And the same argument exactly applies to the use of these hypertrophied aluminium monstrosities by the Germans.

I admit that the Short Sunderland flying-boat, which also has four motors, and is pretty much about the size of the Focke-Wulfe Condor, has done fine work. But the Coastal Command, and its wise old Commander-in-Chief, know precisely the limitations of the Sunderland, and they do not do any sub-stratosphering with them, so as you'd notice it.

On the contrary, they skim along the surface of the water so that the German fighters cannot get underneath them, and they just bristle with guns with which to fire upwards, and anyhow they do not as a rule go playing about where there are hordes of fighters to attack them.

When the Germans built the first few of these things, little General Udet, now I believe "Marshal of Flying Troops," came into power on the technical side. During the last war Udet was one of the finest single-seater fighter pilots in any country. After the war he developed into just about the finest aerobatic pilot.

Little Udet naturally disliked these colossal bombers, and told the makers they could go and offer them to the world as air-line machines. He said they were all right as flying hotels but no use for war. That is why, if you see a four-motor machine flying around this country in daylight, it may not be a German. Lots of Continental air-liners took refuge with us, when their countries were invaded, and naturally we have taken them over and now use them for our own transport purposes.

The point is that although one of them may carry several tons of bombs, they use up as much material and as many man-hours in construction as would turn out a young fleet of single-seater fighters or even bombers of reasonable size. I do hope that some of my young friends among our fighters will bring down a few of these German giant bombers to add to Lord Beaverbrook's piles of aluminium (or duralumin) scrap. We ought to be able to build several Spitfires or Hurricanes from the result when it has been ironed out a bit.

One of the air experts on one of our dailies remarked the other day that the great advantage of these things is that they carry a lot of bombs but only need three men to handle them. We shall bag a lot of them if that is also the German view. I have reckoned them up with some of our fighter people, and they seem to think that if the things are going to be reasonably self-protective they will want—not the three men mentioned, but also six or eight gunners on board, besides the normal crew of two pilots, a navigator, and a radio man.

Talking of these big machines reminds one of those clever people who swear that they can identify any aeroplane by the sound of its motors, and of the simple-minded people who know that when they hear an aeroplane very high up making a nasty wow-wow-wow sound, it is a German bomber.

Air Marshal Sir Philip Joubert, who is most reliable and accurate, remarked in a broadcast recently that he could not tell the difference between one twin-motor machine which went wow-wow and another. And he ought to know, for he has been in this flying business for more than twenty-eight years, to my knowledge.

The point is that all German twin-engined machines do *not* go wow-wow-wow, and some of ours do. It all depends on the skill or technique of the pilot. Our air-line pilots were always told to keep their engines strictly in step (in phase, is the proper phrase) because the wow-wow bothers passengers. I should think that it bothers the pilots too, because it sounds much worse inside an aeroplane than it does outside. And the pilots of all the German machines in which I have ever flown were also careful to keep their engines in phase.

One theory about why the German war pilots do not keep their engines in phase is that they want to advertise their presence and so terrorise the population. They can take it from me that that does not work.

Another much more ingenious theory is that as all the German bombers have twin fins and rudders, each in a slipstream of a separate airscrew, if the engines are held in phase the slipstream tends to keep the machine flying in a circle, and the pilot has to hold it straight with the rudder, but if he puts his engines out of phase to the proper degree he can make the slipstream of one airscrew counteract the other and so trim the machine that it will fly straight and let him give his feet a rest.

There may be something in the idea, because the German aeroplanes do not have trimming-tabs or other rudder adjustments as ours have. And, anyhow, most of our big bombers have single fins and rudders.

But the best reason for believing that aeroplanes which go wow-wow-wow at night are German is that the wow-wow-wow is so frequently accompanied by the crumping of bombs and the banging of guns, especially when one hears it going north about midnight on the direct route from the territory of our ex-gallant allies, the French, up to our midland and western industrial areas. Our own bombers would not be likely to go that way at that time. They generally come home in the early morning and on different routes.

THE AIR "DESTROYERS" OF THE ROYAL NAVY: The Blackburn Roc is a sister to the now famous Blackburn Skua; it is one of the latest of Britain's many types of aircraft and is now in use with the Fleet Air Arm. This picture is one of the few so far taken showing Rocs actually in formation flight; note that all the pilots are here flying with the cockpit covers drawn back. This fine machine is a two-seat fighter which is used for dive-bombing: it can be equipped as either a ship-plane or a seaplane. Its design and equipment are fundamentally the same as those of the Skua fighter dive-bomber; and it embodies in its construction the multi-gun turret as used in the Defiant with such devastating effect against the Nazis. When used as a seaplane this aircraft has water-rudders for easier handling in the sea. There are four guns in each turret; the racks for bombs can be seen beneath the wings; the upright mast amidships is for the wireless; and the forward pointing object at the end of the starboard wing is the Pitot tube for the Air Speed Indicator

This page is missing from the print copy used for digitization.
A replacement will be provided as soon as it becomes available.

This page is missing from the print copy used for digitization.
A replacement will be provided as soon as it becomes available.

This page is missing from the print copy used for digitization.
A replacement will be provided as soon as it becomes available.

This page is missing from the print copy used for digitization.
A replacement will be provided as soon as it becomes available.

The R.A.F. are still ATTACKING—from NORWAY to the NEAR EAST

THE R.A.F. ATTACK ITALY'S BASES IN NORTH AFRICA

Almost daily, bombers of the R.A.F. Middle East Command are raiding the Italian Air Bases in North Africa, along the Libyan coast. This picture was taken a few seconds after five Wellesley bombers had attacked the important Asmara Aerodrome. One of the bombs scored a direct hit on the officers' mess; although considerable opposition was encountered on this occasion, all the British aircraft returned to their base

THE MEN WHO HAVE BEEN BOMBING GERMAN FORESTS AND HIDDEN OBJECTIVES

British bombers have been steadily pursuing their pre-arranged attacks. Each day brings fresh news of R.A.F. successes, the latest being the bombing of the forests: here, hidden in the heart of the great woods, military objectives have been attacked and huge fires started. At this time of the year the pine trees are like torches. *On the left*, a bomber crew are seen boarding a truck to take them out to the aircraft on the other side of the aerodrome. *On the right*, three of the crew obviously ignore the superstition of "three lights from one match"

ENGLAND'S LAST BATTLE: What is said to have been the last battle fought in England took place on Clifton Moor in December 1745, during the course of the Young Pretender's retreat from Derby when the Rebels were defeated. The above picture shows the little church at Clifton, near Penrith in Cumberland, where eleven of the soldiers killed in this action were buried in its tiny churchyard. The battle is described in Scott's *Waverley*

TO COMMEMORATE THE DEATH OF A COLLEGE PRINCIPAL: This picture shows the front of New College, Oxford, with the painted escutcheon known as a "hatchment," which is only placed outside a College on the death of its Principal when in residence. This one was placed on the death of the Right Hon. H. A. L. Fisher, the late Warden of the College. The arms are half those of the College and half those of the Principal

VEGETABLES IN PLACE OF FLOWERS IN THE TEMPLE: Where once musk-roses bloomed, and other beautiful flowers were carefully nurtured in the Temple Gardens, cabbages now ave in the sun. The "Grow More Food" campaign is now being waged right in this ancient heart of the City

The World of Books—By Vernon Fane

THE WAR'S BREEDING GROUND

A Minister's Account of the Spanish Civil War and the Events which Led up to it

SENOR ALVAREZ DEL VAYO was Foreign Minister, War Minister and the chief international spokesman of the Spanish Republic. **FREEDOM'S BATTLE** (Heinemann. 15s.) is his own survey of the Spanish Civil War, and of the events which led up to it.

If the statement be accepted that "the first battle of the second World War was the Civil War in Spain" (and there are few to-day who would even attempt to argue it), this book must be said to have not only a deal of importance, but some urgency in these days. Senor del Vayo is in a position to reveal from first-hand information, the workings of the international conspiracy which plunged his country into war.

He is also able to write calmly and detachedly of the forces of intrigue and rival partisanship which surrounded the activities of what was called the Popular Front, and which hampered those who were attempting to organise the resistance of a people marked down for sacrifice. Spain was the first major move by the Axis powers to break Great Britain's command of the Mediterranean, to obtain Atlantic bases and valuable mining concessions for Germany and gain command of a key position which was ultimately to result in the collapse of France.

One of the most clear and lucid, and at the same time startling chapters in this book is the one in which the author deals with the part played by the so-called non-intervention policy in this early deployment of Axis strategy. Not less startling are his revelations concerning the Russian intervention, engineered at a time when Moscow and its Communist satellites throughout the world were avid supporters of the Popular Front. It should not be forgotten that the Spanish Civil War was the result of military rebellion, to the outbreak of which the three big dictators contributed, each in his own manner. The ultimate issue of this struggle is still being fought out in Europe, and it is inevitable that this early and tragic chapter should still be blurred by misconceptions, and its main purposes and direction thrust aside by partisan argument. This book, with its calm objectivity, its obvious air of authority and its lack of bitterness should do much to dispel that cloud.

This perhaps is most evident in the chapter on Franco's Spain. It is possible to appreciate the author's picture of a desperately impoverished and miserable country in which the worst excesses of oppression are rampant, and in which every conception of freedom and liberty is ground under the iron heel of militarism and clericalism.

Senor del Vayo has been condemned on the one hand as an out and out agent of the Third International, and on the other hand, by the pundits of Moscow, as the "lickspittle of British Imperialism." Such is the fate of a Spanish statesman who had attempted to champion progressive ideals in a country where rival "ideologies" had to pretend to come to grips in order that later they could wreak their joint and nefarious designs upon an unready Europe. It is in character with the man, and with his faith in his people, that he finds, even in these tragic days, reasonable hope to believe that Spanish democracy will rise again. "The history of the Spanish people," he writes, "is full of audacity, courage and surprises."

From the foregoing to a work of fiction might seem something of a jump, but **LOSS OF EDEN** (Faber. 7s. 6d.) by Douglas Brown and Christopher Serpell bears the sub-title of a Cautionary Tale. Assuredly it is fiction, but fiction of a prophetic kind which demands attention from every intelligent person in this country to-day.

Briefly it is an imaginary account of progression from Munich. Through a document discovered and published by a New Zealander many years after the collapse of Europe, it relates the story of the gradual conquest and disintegration of Great Britain, following a series of acts of appeasement and compromise by its rulers. That some of these did not hesitate to work the will of their real masters in sabotaging Government, in sapping the confidence, and in perplexing and bewildering the common people, is but one stage in the miserable retreat.

The picture that these two authors manage to draw of the gradual conquest of this country and how it was effected, of the excesses and dreadful conditions which followed in its wake, is a grim and sinister one. It may be said that this tale need not be taken too seriously, since what is happening to-day has already made its fulfilment impossible. But the cautionary angle is still there. There are enough latent forces, some of them possessing a full measure of vitality, to work these ends at the slightest sign of weakness, and which make the publication of this book something to be worthy of attention even in these days.

MY NAME IS MILLION (Faber. 8s. 6d.) adds to the literature of what the anonymous author describes as the fifth partition of Poland. There may have been a disposition in the early days of this war to have criticised the Poles for their all too rapid and tragic collapse against the German onslaught History in the past year has most tragically and vehemently silenced that kind of talk Whatever sins were committed by her political leaders and by her high command, Poland stood magnificently against overwhelming odds, and her army and her people once more demonstrated to the world their heroism and their almost fanatical patriotism.

The author of this book is an Englishwoman married to a Polish officer. She endured all the horrors of the sack of Warsaw, was constantly under fire, and through almost incredible adventures eventually reached Lithuania, where she was at last able to obtain permission to catch a boat for England. Even then her troubles were not at an end, for the ship was captured by a German warship, and she and her husband were taken to Germany and handed over to the Gestapo.

This bald recital does no justice to this vivid and human narrative. They suffered and suffered deeply at the hands of the Germans, but they also suffered indescribably at the hands of the Russians. It is an angry, bitter and at times terrible record. But through it all lives and breathes the unconquerable spirit of her adopted country. If freedom is to be reborn in the world, the heroic resistance of the Polish people will have contributed in no small measure to the victory.

Mr. Basil Woon has lived most of his life in America, fought with the American army as a flying officer in the last war, and so far identified himself with the American scene as to interpret Paris to the swarming thousands of them who came over and took possession of that city after the last peace. Yet, in spite of all temptations, etc., etc., he remains an Englishman, and this war finds him publishing his autobiography and fighting in the ranks of his own countrymen.

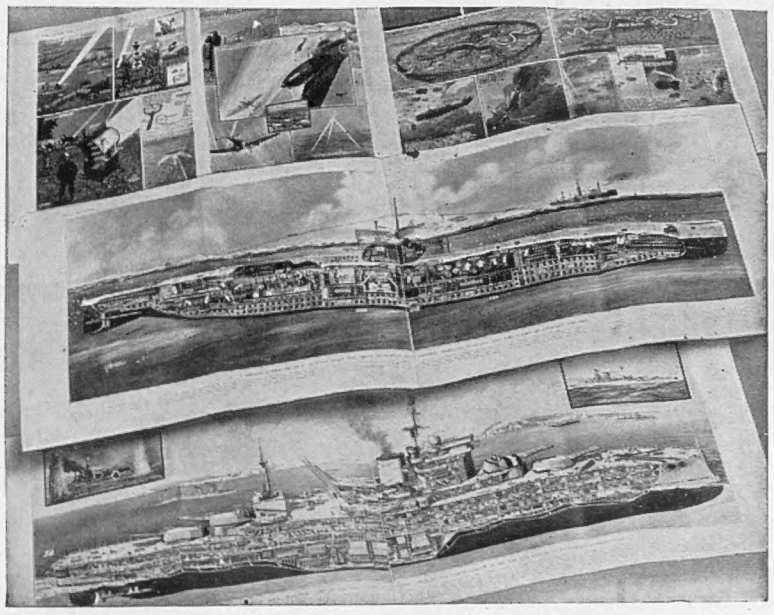
EYES WEST. (Peter Davies. 10s. 6d.) is the record of a lively personality, and written with the kind of ease and raconteurish mood which is the gift of the man who has always made a living by his pen. It has no pretensions to profundity, and it philosophises only in peroration, when the author is quite rightly unable to resist the temptation to find in his own country and among his own countrymen qualities which long residence abroad had tended to obscure. It is full of good stories and bright anecdotes, and is on the whole an unpretentious and rather engaging book.

There must be thousands who have spent happy days amongst the dales and hills of the English Lake District. For these I would recommend the immediate purchase of **LAKELAND THROUGH THE LENS,** by W. A. Poucher (Chapman and Hall. 18s.)

It is a really superb collection of over 120 camera studies of favourite places, with concise descriptions of each picture. Each viewpoint has been carefully studied, and for every photograph full data is given of the time of year, exposure, aperture, filters used, etc.

In these drab, war-time days, the joy of revisiting some of the finest beauty spots will be very great—even if the revisit is only made possible through that wonderful instrument—the modern camera!

THERE'S A WEALTH OF ENTERTAINMENT IN "INSIDE KNOWLEDGE"



A large number of the informative diagrammatic drawings, chiefly by that well-known artist G. H. Davis, which have been published from time to time in THE ILLUSTRATED LONDON NEWS, are now available in collected form in a special 32-page publication entitled "INSIDE KNOWLEDGE." This will appeal to all who want to know the inner workings of things which the majority of us see only from the outside. Many of these interesting sectional drawings are reproduced as panoramas, EACH MEASURING OVER THREE FEET WIDE. The contents include many fine illustrations of British, French, German, and Italian fighting planes with details of performance, armament, etc. Diagrammatic drawings clearly show how householders can best protect their homes against air raids; and the organisation of A. R. P. services. Searchlights and the balloon barrage are portrayed. Bound in a Leather-finished Cover (Size 20½ ins. × 14½ ins.).

Price 3/6 *(By Post: Inland and Abroad 4/-)*

Obtainable from W. H. Smith & Son's branches, and principal Booksellers, or direct from:—

The Publisher,
THE ILLUSTRATED LONDON NEWS,
32-34, ST. BRIDE ST., LONDON, E.C.4

That money in your pocket can become part of another British fighter, another gun, another shell. Don't spend it on yourself. Lend it to the country. Buy National Savings Certificates.

Certificates!

Certificates are easy to buy and easy to cash at short notice. They cost 15/- each and increase in value till in 10 years they are worth 20/6. This represents a rate of interest of £3. 3. 5d. per cent, which is free of Income Tax.

Certificates may be bought at Post Offices, Banks and from Honorary Official Agents in shops and stores. They can also be bought in instalments by means of savings stamps and through Savings Groups.

Put all you can into National Savings Certificates . . . **and hit back hard!**

Issued by The National Savings Committee, London

BRITAIN'S COMMERCIAL AND MARITIME SITUATION

(Continued from page 347)

corresponding period of last year. Even allowing for the increased prices this year, the result is the best answer to Hitler's claim to have blockaded the British Isles, and Haw-Haw's claims to have sunk the whole of our Navy.

Outstanding events in the shipping world during the year just closed were too many to tell of here, but one or two might be mentioned.

In spite of the Nazi world-wide intelligence service, and it probably was never so extensive as now, the world's largest liner—the 85,000-ton *Queen Elizabeth*—was not only completed at Clydebank under conditions of possible attack by air, but safely taken down the Clyde, when the monster could not but be seen towering above the river banks by thousands of people, and made an uneventful voyage across 3,000 miles of Atlantic ocean, arriving at New York on March 6. Surely one of the most striking cases of a successful secret operation in war-time.

The *Altmark* incident in February, involving the dramatic rescue of about 300 British seamen as prisoners of war, was another example of the fine spirit of dash and daring which permeates the Navy.

What then is the net outcome of the first year of this totalitarian war from the point of view of the blockade?

Our food stocks in this country are now much greater than they have ever been before, even in peace-time, and our rationing, whether in food or utilities—which started last January—is so moderate as to be scarcely noticeable. This is in spite of continued attacks by submarines of the two enemy fleets, by surface raiders, which have not had a tithe of the success they had in the last war, by mines strewn indiscriminately all round our coasts and by swarms of aircraft; in spite of having all the West Coast ports from Narvik in the North to the Spanish coast at the enemy's disposal, and in spite of a total loss of some 2,000,000 tons of our own merchant shipping. This big tonnage has been entirely replaced, and we have more tonnage than ever at our disposal.

Over 1,000 ships leave America each month for Britain. The value of our exports to America in July was 80 per cent. above the pre-war average, while the tonnage leaving our ports for the United States in the same time was 25 per cent. higher than the monthly average from January to April last. The Royal Navy has provided convoy escort to more than 33,000 ships of all nationalities, with a loss of only about 1 in 600. No large port in the United Kingdom has been closed due to enemy action for more than 24 hours. In spite of the almost complete loss of our European markets, our trade has been well maintained by diverting it elsewhere, and capturing what were formerly enemy markets.

THE NEW THEATRICAL PRODUCTIONS

As a matter of record we publish Mr. Page's criticisms of two new plays. Most of the London theatres are now closed, however, owing to the heavy and indiscriminate bombing of the capital. And Londoners must therefore wait until the present attacks subside before they can sample these new attractions!

Reviewed by Philip Page

NOT long ago at a Surrealist exhibition I saw a canvas on which the artist had painted a human eye and a starfish and nothing else. But on the top right-hand corner was nailed an empty sardine-tin and opposite to it a shaving-brush. Bearded youths with sallow-faced girl-friends purred before this adoringly and thought it "quite too divinely clever." So far as it can be compared with anything, I would compare *The Infernal Machine* at the Arts Theatre, a translation of a play by Jean Cocteau, to that picture. It certainly provoked similar comments from the faithful, who, if costume is any indication, seemed to be present in force.

At the risk of being considered in this case a Blimp-like Philistine—a risk for which I claim not one iota of courage—I put down *The Infernal Machine* as a piece of pretentious nonsense. If anyone says "Ah, but you don't understand it!" I will reply that I understand every silly word of it and that it is particularly easy to understand. It must have been equally easy to evolve; the only thing in it that is complex is the Œdipus complex—a piece of unpleasantness which has appeared *ad nauseam* in high-brow plays in general and in particular those of M. Cocteau.

CHARLIE, THE GREAT DICTATOR: One of the first pictures of Charlie Chaplin in his new film *The Great Dictator* which is calculated to make Hitler and his bell-boy Mussolini rage at its satirical humour. Like Hitler, Charlie does not believe in taking any chances. He is seen here in full kit for the Blue Danube with a gun to keep away mosquitoes and an atomizer for germs

A clever cast must have spent (and wasted) a lot of time over this play, if only in the matter of learning their lines, for it is words, words, words all the time. Miss Jeanne de Casalis managed to infuse, by her sheer personality, some sort of comedy into an immensely verbose bedroom scene with Mr. Peter Glenville as young Œdipus, a part which seemed as long as Hamlet and is possibly longer. Anyway, Mr. Glenville should know, for he has played both. Mr. A. Bromley-Davenport is too polished a comedian to make the character of an elderly bore altogether boring and Miss Leueen MacGrath performed a difficult job with any amount of charm.

"In Town Again."—Mr. Herbert Farjeon's intimate revues have few—if, indeed, any—dull spots in them. So it is not difficult to imagine the entertainment value of such a revue as *In Town Again* at the Criterion, which consists of the cream of his previous successes. This is a vastly cheery little show. If it need not be labelled sophisticated, it is certainly intended to appeal to intelligent adults, though there are splashes of the broadest and merriest humour, the best of them an irresistible burlesque of the pseudo-French revue which flourishes in this country; *Voila les non-stop nudes!* is a real gem.

Many gems of the Little Theatre revue of last year continue to dazzle us: I can think of no higher praise for Mr. Wilfrid Hyde White, Miss Nadine March, Mr. Eric Anderson, Miss Barbara Wood, Miss Joan Sterndale Bennett, Miss Sheila Douglas-Pennant and other clever folk than that they did not make me regret too much the absence of Miss Hermione Baddeley, Mr. Cyril Ritchard and Mr. George Benson.

A Royal Warrant has been granted to Messrs. William Gaymer and Son, Ltd., of London and Attleborough, Norfolk, as Purveyors of Cyder to His Majesty The King. This firm held the warrant of appointment to the late King George V from 1928.

Smokers' 'Fur'

How to detect it— How to prevent it

Try this now. Run your tongue round your mouth—do you notice it . . . a rough woolly feeling. Smokers' fur has got a hold, and is damaging and staining your teeth. But don't worry, you can stop this fur from ruining your teeth to-day.

Dentists know smokers' fur is caused by excess acid in the mouth. Kill the acid and you shift the fur. What is the scientific way to destroy mouth acid? 12,000 dentists say 'Milk of Magnesia' brand antacid is the most effective antacid known. 12,000 dentists urge smokers to use the toothpaste containing 'Milk of Magnesia'—the only toothpaste containing it—Phillips' Dental Magnesia.

Commence fighting mouth acid to-night. Get a tube of Phillips' Dental Magnesia and clean your teeth with it each night and morning. Then you'll feel the difference; no more morning mouth; no more stale breath. Instead you'll have teeth which look clean, feel clean, are clean; a sweet mouth to give new zest to smoking. A mouth that will say Good morning! and mean it.

6d., 10½d. and 1/6. Sold everywhere.

Phillips' Dental Magnesia

★ *'Milk of Magnesia' is the trade mark of Phillips' preparation of Magnesia.*

THE SPHERE TRAVEL BUREAU—*Continued from page iii of cover.*

Near enough to reach the City or the West End with ease. Far enough to be well clear of the smoke and noise of London. A 2-minute walk brings you to the station, a 37-minute ride lands you at Paddington, and at the end of the day you return to a homely hotel where *every bedroom has its own bathroom.* A hard tennis court in our own 12-acre grounds. **Inclusive terms from 4½ guineas per week.**

So Near and Yet so Far

GROVE HALL HOTEL TWYFORD, BERKS. *Telephone:* Twyford 106

AND *NOW*, Mr. Business-Man! during the war, why not make your base at

Frequent electric trains reach London in half an hour. A most comfortable, quiet hotel, a lovely garden, excellent tennis courts. Telephone: 2271

If you must stay within reach of Town

THE RED HOUSE, LEATHERHEAD

Roundabout Hotel, STORRINGTON, Nr. Pulborough, Sussex

GOOD GOLF. GOOD AIR. GOOD FOOD. GOOD BEDS. . . . AND PEACE.

Now under the personal direction of Mrs. A. K. and Mr. A. G. Kempster (formerly of the Stafford Hotel, St. James's, S.W.1). *'Phone: West Chiltington 123*

SCOTLAND

Free from alarms, with full scope for excursions

Spend your much needed and long delayed holiday at the comfortable

STATION HOTEL, PERTH

A recognised headquarters for the Highlands

ASK YOUR CHEMIST FOR FREE BOOKLET

"HYGIENE FOR WOMEN" BY NURSE DREW

RENDELLS PRODUCTS FOR FEMININE HYGIENE

APPROVED BY DOCTORS

If you wish, write to NURSE DREW, VICTORIA HOUSE, SOUTHAMPTON ROW, LONDON, W.C.1.

Better in all ways

NUFIX

for Hair Health and Perfect Grooming

Eliminates SCURF-DANDRUFF

Handy, convenient, safe to carry

BOTTLES 6'1-1'6 TUBES 6'1'

AT CHEMISTS, HAIRDRESSERS, STORES & N.A.A.F.I.

WALDEN & CO (NUFIX) LTD., THE HYDE, LONDON, N.W.9.

★ TRY 'NUFOAM' IN TUBES — 3 SHAMPOOS 6°

THE BRITISH

SAILORS' SOCIETY

earnestly appeals for help

to enable them to keep pace with the urgent and increasing cost of maintaining Homes and Hostels in ports all over the Empire for our Seafarers' needs.

Donations welcomed by the Hon. Treasurer, The Rt. Hon. Sir Frederick Sykes, P.C., 680 Commercial Road, London, E. 14, and Mr. Herbert E. Barker, General Secretary.

Clear that Cold with **VAPEX**

BREATHE THE VAPOUR

V194

PRINTED IN ENGLAND by EYRE & SPOTTISWOODE LIMITED, *His Majesty's Printers*, at East Harding Street, London, E.C.4, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., 32-34, St. Bride Street, London, E.C.4.—*September* 14, 1940. Entered as Second-class Matter at the New York (N.Y.) Post Office, 1903.

In Quest of Good Hotels

By ASHLEY COURTENAY

LAST week I received a letter from a reader which said she would have liked to have returned to her old love, the Spa Hotel, Tunbridge Wells, but she had heard that this Kentish spa was "anything but peaceful."

On one of those recent days—when we in London carry on—while sirens with their plaintive wail remind us that enemy aircraft are about, I headed for Tunbridge Wells to discover facts, and perhaps destroy fiction.

It may be that I was disappointed as I alighted at Tunbridge Wells station, for the Royal Borough was wearing that same complacent look that she has worn for the last thirty years I have known her.

Mount Pleasant and the High Street were blocked, not with the debris I had supposed from the alarmist stories, but by cars, for shopping was in full swing.

As I walked across gorse-clad common there was a loud report, as a mischievous looking six-year-old exploded a paper bag in a nurse's ear.

It is on the top side of the common that one finds the Spa Hotel, which, long before war started, adopted the slogan —"and here is peace." Even more apt are those words to-day, for under the shady trees which are such an outstanding feature of the 60 acres of hotel grounds, there were groups of people, knitting, reading or relaxing.

Yet there was a quiet consciousness that there was a war on, for as I walked in to meet Mr. G. Herrling, under whose management great improvements have been effected in the last year, I overheard a lady of some seventy summers telling another lady of uncertain age, "even if I live to be a hundred, I am certain I shall never see again such an exciting dog-fight." This referred to an incident of the previous day when for half an hour the peacefulness overhead had been temporarily disturbed by the excitement of a twentieth-century "scrap."

But such aerial combats are all too rare, for though air-raid warnings are sounded, as they are everywhere at present when the enemy crosses the coast, peacefulness reigns in Tunbridge Wells itself because neither she nor her neighbourhood possess any military objectives.

For all that, Mr. Herrling believes in preparedness. I have visited few hotels where there are such adequate air-raid precautions. The air-raid shelters are equipped like drawing-rooms. Each has comfortable arm-chairs, and are replete with rugs, pillows, ventilating fans, and even if the peace of the Spa Hotel were disturbed, one would feel uncommonly safe and comfortable in such well-thought-out surroundings.

Tunbridge Wells and her institutions have been slow to make changes, but of recent years, thanks to the drive of a few public-spirited men, of whom Councillor F. J. MacNab, managing-director of the Spa Hotel, is one, Tunbridge Wells has re-established itself as one of our principal inland health resorts, and the Spa Hotel and others are as full as ever I have known them.

I witnessed plenty of the energy and enthusiasm of Mr. G. Herrling, manager since last March. "A new broom sweeps clean," and bathrooms, corridors, and many bedrooms have been regarnished and refurnished. A number of old upstair sitting-rooms have been converted into comfortable bed-sitting-rooms, and though there is much more that could be done, one can truly say of the Spa Hotel—"and here is peace."

One thing I was glad to see retained was the old staff: hall porter, head waiter, chef, and many others. There is nothing more satisfying than to come across such old friends in the course of one's travels, for of what avail are modern comforts when old-fashioned service is missing?

The most successful of Mr. Herrling's innovations is the Aperitif cocktail lounge which has been made with a separate entrance next to the billiards room. Previously there was nowhere in Tunbridge Wells where ladies could forgather, either with or without their husbands. The Aperitif has quickly filled that role. Already it has become the social rendezvous of the town and neighbourhood. Further, far from disturbing in any way the hotel residents, it has in fact been welcomed by them, and if there has been a feeling that the Spa Hotel, Tunbridge Wells, caters mainly for the old and the decrepit, the Aperitif is having a reinvigorating effect.

The usual mid-day air-raid siren went off just as luncheon was being served. No one stirred in the dining-room with its wire-panelled, anti-splinter-treated windows. As the sirens concluded their unnecessarily dismal wail, all was peace once more. The only comment concerning the incident came from a neighbouring table, "it won't be long now before Hitler on toast appears on the menu."

ANSWERS TO CORRESPONDENTS

E. M. C., Bucks.—Symonds Yat has been spoiled by the day tripper, and there are not really any hotels there I would care to recommend, but there is a nice, small guest house, Terraces, run by a newspaper man and his wife and daughter. You would, I am sure, be comfortable here and the position is lovely. Alternatively I should stay at Ross-on-Wye, the best hotel being the Mount Craig.

J. G., Shropshire.—I can certainly help you as regards the Bovey Tracy neighbourhood. There is an admirable hotel called Front House; while at Chagford, there is a private hotel, Mill End; and another smallish one, Easton Court, which is unique in its way. All these are described in my *Let's Halt Awhile* book for Devon, Cornwall, and Somerset.

A. D., Chester.—I shall be only too pleased to help you in your quest. I have just visited a most delightful old country manor house called Harleyford Manor, on the banks of the Thames between Marlow and Henley. It is the most peaceful place imaginable. Here, one is right off the beaten track in 1,000 acres of grounds. If you do fancy that part of the world, be sure to write to Mr. F. Clayton for further particulars.

Mr. Ashley Courtenay is always pleased to advise "Sphere" readers of hotels, both large and small, known to him personally. Letters, accompanied by a 2½d. stamp for reply, should be addressed to him, c/o the Editor, THE SPHERE, *32-34, St. Bride Street, London, E.C.4. Personal and telephone inquiries, however, cannot be accepted.*

THE SHAFTESBURY HOMES AND "ARETHUSA" TRAINING SHIP

The Committee of the *Arethusa* Training Ship continue to receive good news of old *Arethusa* boys who are steadily climbing the ladder to success. One of these is "Clifford," who, having just completed three years at sea with a very good character, has received the Committee's award of a Medallion, and writing his thanks, the Old Boy says: "I shall treasure this award greatly, and look upon it as an inspiration always to go forward; and a reminder to me of many happy days spent aboard the *Arethusa*." New boys are clamouring for such a chance, but it costs £100 to train such a boy. If all the Cliffords alone reading this would send a gift to take a share in giving a lad a chance, we should soon receive the amount necessary. Please do, and address your gift "Clifford," 164, Shaftesbury Avenue, London, W.C.2, from which address they will be gratefully acknowledged.

CONDITIONS OF SALE AND SUPPLY

This periodical is sold subject to the following conditions, namely, that it shall not, without the written consent of the publishers first given, be lent, resold, hired out or otherwise disposed of by way of Trade except at the full retail price of 1s.; and that it shall not be lent, resold, hired out or otherwise disposed of in a mutilated condition or in any unauthorised cover by way of Trade; or affixed to or as a part of any publication or advertising, literary or pictorial matter whatsoever.

LANSDOWN GROVE HOTEL BATH

600 feet above sea level, in the pure air of the Lansdown heights, in a sheltered position with south aspect and delightful views over the Roman City and country-side, and everything conducive to perfect comfort and enjoyment. Garage attached. Air Raid refuge in the hotel. English Chef, experienced in the special diet required by those undergoing Spa treatment. Hotel motor 'bus at frequent intervals to the Baths and Pump Room (free). Moderate terms. 'Phone: Bath 3235.

Safe Sanctuary

Here, in this unspoilt corner of South Devon where sea, sun, and soft air combine to bring you peace, is this first-class hotel directly overlooking the water. Good Golf. Bridge. Private bathrooms and Suites.

Terms from 5 Gns. a week

ROSEMULLION HOTEL
BUDLEIGH SALTERTON, SOUTH DEVON

CREST CROWBOROUGH 394-5 SUSSEX

From 4½ to 9 guineas a week.
Special reductions for long stays as well as special week-end rates for the Services.

PINE SCENTED DAYS

Spend them in the heart of the country, yet only 75 minutes from London. Enjoy the best of good fare in lovely surroundings. All-weather tennis. Golf.

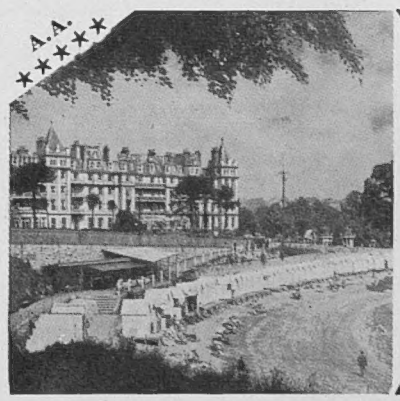
An 18th-century coaching house, the pride of 20th-century days. Sample the cocktail lounge, grill and ballroom. Enjoy a good cellar, good food and good nights.

Royal Clarence Hotel
EXETER
"*Neath the shadow of a Symphony in Stone.*"
Write for Brochure or 'phone 4071/2

THE COMPLEAT ANGLER

A Riverside Retreat for the Business Man.
Within easy reach of London, yet deep in the country.
Under the supervision of Mr. BALLY, late of Boulestin, this hotel combines comfort and convenience with food that only an expert can produce.
MARLOW-ON-THAMES

SIDMOUTH
KNOWLE HOTEL
A FINE COUNTRY HOTEL WITH EVERY POSSIBLE COMFORT
PERFECT QUIETNESS



GRAND HOTEL TORQUAY

A grandstand position for security and peaceful environment. Shed your war worries in the grand manner, and enjoy the beauties of Tor Bay in comfort from this five-star hotel, whose inclusive terms cover free golf, tennis, squash, billiards and dancing.

Write R. Paul, Manager, or telephone Torquay 2234

Within several acres of lovely Gardens
LINCOMBE HALL
HOTEL TORQUAY
has ever been a sanctuary of peace—and never more so than now.
Its beautiful appointments are also in harmony with its peaceful surroundings and here—one can relax and enjoy a high degree of comfort and good food.
50 bedrooms—many with private bath
Inclusive terms - - from 4½ guineas

For PEACEFUL Autumn and Winter Residence
Plus the warmth and good fare of a first-class hotel—
Queen's Hotel, PENZANCE
With 100 bedrooms, modern bathrooms and lift we can offer you every comfort and a full southern aspect. From 4 gns. inclusive.
Telephone: 471/472 *Telegrams: Seaward*

AND HERE IS PEACE . . .
A sheltered park of 60 acres. A sun-trap 400 feet up. An hospitable and first-class hotel for Summer. London under an hour by train. Sporting golf course in the grounds.
THE SPA HOTEL ROYAL TUNBRIDGE WELLS
Write for tariff-booklet entitled "And here is peace." Telephone: Tunbridge Wells 1911

Continued on facing page

STORIES LIKE THESE
MAKE LONGER NIGHTS BRIGHTER

"HEART OF BRITISH OAK"
By PETER B. KYNE.

• • •

THE *Lancashire Maid* was in the dock at Liverpool by ten o'clock that night and Captain Hannay had young Kessler up in his quarters for a night-cap of whisky-and-soda and stated with genuine regret that in the morning they must part. "But I'll write Hitler about you," he promised. "And I'll write your father, too. I'll arrange to have the British Broadcasting Corporation broadcast my letters."

"You're a rare good sport, sir. Thank you more than I can say. What happened to that submarine?" he asked. "I heard two muffled explosions that shook the *Lancashire Maid*."

"Oh, we sank her with all hands, Frederich."

"How? There was no gunfire."

"Blew her wide open with two big depth charges rolled off the stern of a forty-mile speed boat I purchased especially for the job in Buenos Aires. You thought I was freighting it home for somebody, I dare say."

"But—where did you get the depth charges?"

"The British Consul in Buenos Aires communicated with the commanding officer of the British fleet waiting off the mouth of the river for the *Graf Spee* to come out. So when we came out of the river one of our destroyers kindly gave me two large depth charges set to explode at twenty feet. I dropped them within six feet of the submarine. She went up and she went down."

"But—how did you know you'd have an opportunity to use them?"

"I didn't. I just guessed. Something told me you'd break your parole given me that you'd be a perfect guest; that you'd telephone your father from Buenos Aires and he'd make arrangements to get us. I had you shadowed in Buenos Aires. You were seen to buy that electric torch. You hid it in an empty bucket in the fire bucket locker on top of the house. While the ship proceeded without lights you were up on the house all night flashing signals for that submarine. • • •

Read this story of the sea and submarines in which an old navy man gets the better of German duplicity and deceit, in the September issue.

"THURSDAY NEXT AT TEN"
By RICHARD OLIVER.

• • •

"They had a wireless signal when they were well on their way—a ruddy spy in this country — *that's* what happened," said the Wing Commander. "See how they altered course south when we all thought they were going for the Midlands. It was a damned spy with a radio."

Titus's great body seemed to shudder. "Not a radio, Tony—a wireless transmitting instrument."

"Anyway its your job to collect spies," fired Tony.

"Steady—no need to flap," said the girl. "Does it mean that Thursday night's raid was not just a lucky shot?"

"It does—we never thought it was luck," Titus drawled aggravatingly and impersonally. "The enemy bombers left Denmark and Germany in three formations about eight o'clock. They flew due west for two hours and then they converged on — on F4.5 and bombed a stationary train full of high explosives. And that train had only *stopped at that place at nine-thirty*. An hour and a half *after* they left the ground in enemy territory!" • • •

This exciting story tells how a girl frustrates last minute information, given over the wireless by a fifth columnist, reaching the enemy bombers.

ARTICLES:

UNCLE SAM GIRDS HIS LOINS
by C. Patrick Thompson
An informative article on the armament problems that beset the U.S.A. to-day.

ACES WITHOUT WINGS
by Stanley Jackson
Read about the ground crews of the R.A.F., their skill and craftsmanship.

COMPLETE HOME SECTION

INTERIOR DECORATION
Look around your home and give it a new feeling. Winifred Lewis in "Old Story, New Ending" shows how this can be accomplished.

COOKERY
September is a month of plenty and Harriet Muir gives you some ideas of how to deal with the bountiful produce.

FASHIONS
Jean Burnup shows that now more than ever clothes commonsense is an enviable quality.

"A TRAITOR HAS NO HOME"
By MAY MURRAY.

• • •

Sometimes she was half frightened by his intensity. Sitting at the tables the atmosphere around him was always electric. He seemed to be chancing his fate. Often she saw that he could have passed the bank winning a small fortune. Instead he ran it once too often and lost. Something seemed always to drive him just too far. It was the same with Verna herself. The time came when she had a feeling of wanting to escape from him. He seemed never satisfied without her. It was the same at breakfast, lunch, dinner. There was nothing she could object to, except his continual presence; an almost arrogant assumption that, for the present at least, he could live her life for her, monopolise every moment.

On the last day Verna saw Emerston she made the excuse that she wanted to go shopping, but he put his hand under her arm and led her to the car and drove her to Nice. Later she was buying a lipstick and bent over a showcase to admire one of those ridiculously extravagant pieces of expensive imitation jewellery made by Lalique or Lelong. Tom bought it and handed it to her. Verna was suddenly furiously angry. His attentions had preyed on her nerves.

"What right have you to do that! It—it's insufferable!"

"But, darling, why?" He raised his eyebrows and smiled.

"Because—well—I don't want you to do it. Surely that's enough." She handed the ornament back to him.

"As you wish." He turned to the girl who had served him, smiling into her eyes. • • •

Read how—Love made him Betray his Country and how Love made him Atone for that Betrayal.

BETWEEN THE SPELLS OF NATIONAL SERVICE, ENJOY

BRITANNIA AND EVE

The most entertaining of all Magazines.

SEPTEMBER ISSUE, ON SALE AT ALL NEWSAGENTS AND BOOKSTALLS

PRINTED IN ENGLAND by EYRE & SPOTTISWOODE LIMITED, *His Majesty's Printers*, at East Harding Street, London, E.C.4, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., 32-34, St. Bride Street, London, E.C.4.—*September* 14, 1940. Entered as Second-class Matter at the New York (N.Y.) Post Office, 1903.